

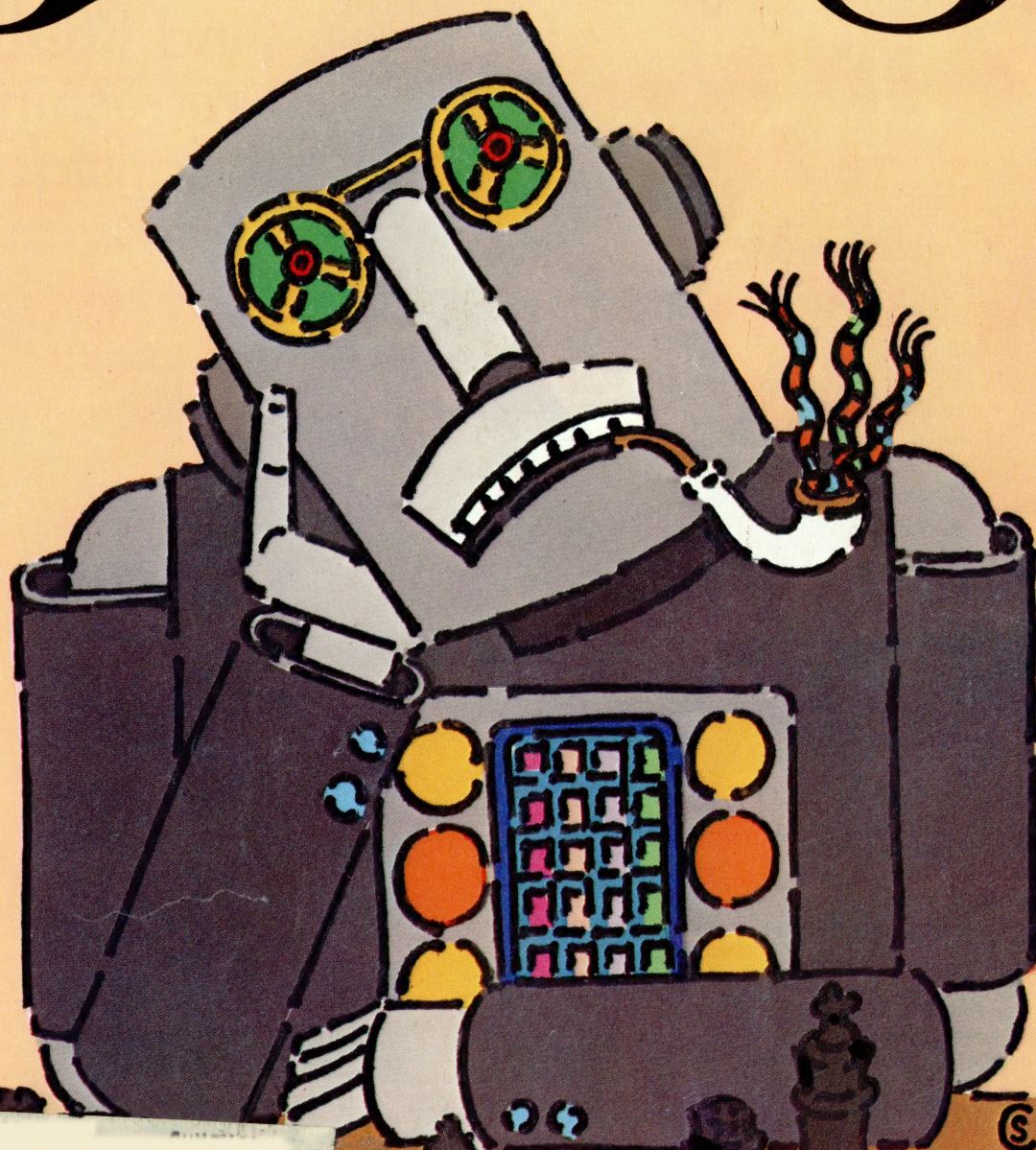
NEW ELECTRONIC GAMES WORD-SEARCH CONTEST
MONOPOLY AT MONTE CARLO PINBALL SHOWDOWN
TANTALIZING PUZZLES HOURS AND HOURS OF FUN

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GAMES

MARCH/APRIL

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Crystal Ball Technology

A Game, a gimmick, or a major breakthrough in predicting the future? You be the judge.

As incredible as this may sound, there may be a way to predict the future. But because of the very sensitive implications, we will leave all conclusions to the reader.

American scientists have developed a computer that, together with the science of cycles, an ancient Chinese theory, and the electrical impulses and sensing mechanism of the human brain, permits you to read your subconscious mind.

The small computer has only two buttons and three lights. But before we describe its uses, you must first understand three basic concepts.

Concept 1: The Science of Cycles

Any student of economics, natural science or the stock market knows that events happen in cycles. Sunspots, weather conditions, the economy, birth rates, wholesale prices, crime and wars—all follow a pattern or cycle.

Concept 2: The Human Brain

The human brain processes data through electrical impulses. This concept was defined by Dr. Norbert Wiener in his 1948 book entitled *Cybernetics*. He stated that the brain handles the electrical impulses using the binary code—the same code used by computers. This theory has since been endorsed by many scientists.

Concept 3: The Chinese Theory

Over 3,000 years ago, the Chinese developed a system of predicting the future through a series of mathematical formulas based on the theory of probability and a series of biological relationships between objects. Called "I Ching," it was more a system of predicting the probability of success than actually predicting the future. In order to understand this system, you must understand three aspects of the I Ching concept: **1)** It uses binary code discovered by the Chinese over 3,000 years ago. **2)** It is based on the scientific theories of probability, and **3)** It is based on relationships commonly found in dreams.

THE DREAM RELATIONSHIPS

When you drop a stone in a pond of water, you create a ripple effect in the water at a specific frequency. If you drop an apple, an orange or an old shoe and by coincidence create the same frequency, you have a relationship between all of these objects even though none of them seems related. The Chinese theory states that there are just such biological relationships in life. Recent psychological studies of dreams have confirmed this.

For example, the theory of I Ching says that a relationship exists between a lake, autumn, wood, the youngest daughter, the mouth and the wind. The Chinese theory further states that all these things have a common frequency or vibration similar to the hypothetical example of the pebble, apple, orange and the old shoe.

In tests performed by leading psychiatrists under controlled conditions, these related objects appeared with startling frequency in the dreams of subjects.

Carl Jung, one of the fathers of modern psychiatry, studied I Ching. Jung's theory and the theory of I Ching state that the various

relationships proven to exist in dreams are subconsciously programmed in our brain. And like the pebble and water example, these relationships have their own rhythms and cycles.

YOUR BRAIN DETECTS CYCLES

Our brain cells, according to the theory, detect and register their cycles. The brain then compares our own cycles with those of hundreds of outside cycles at a given time. In the comparison process, our body and mind are subconsciously directed towards conditions helpful to our development and avoid those which are not. The best example of this theory is the survival reaction of animals who can detect an earthquake days before the actual event, something man cannot do with the most sophisticated measuring instruments.

PUTTING IT ALL TOGETHER

The degree to which we are compatible with another person or situation is therefore how our specific set of biological relationships and cycles at a specific moment are in phase with another event, situation or person.

If we are in phase, the theory states, we will achieve success without much effort. If we are out of phase, the theory states that our chances of failure are greater. It does not determine our fate but rather tells us the probability of compatibility with that person or situation at a specific time. If we are told that our compatibility with a situation will be out of phase, we still have an opportunity to work against or adjust to that probability and still achieve success.

THE I CHING SYSTEM

The ancient I Ching system is described in terms of a game in the "Scientific American" cover story of January, 1974. The steps in the game were long and complicated but designed to transfer the subconscious expressions of compatibility to the real and visual symbols needed to interpret these expressions. Sixty four sticks were used along with enough movement and decisions to let a person's subconscious express itself through physical motions and a binary application to the theory of probability.

So accurate were the results of this process that emperors used it to rule their countries, 250 books were written on its effectiveness and many leading scientists believe in the theory's validity. Some scientists feel that the I Ching concept was taught to the Chinese from a distant civilization—that no group of scholars 3,000 years ago could have invented it.

There was one drawback to the I Ching system. After you determined the exact combination of sticks, you then had to look in a book of 64 formulas and interpret the relationships and their compatibilities to your specific situation. This required the great scholars of China who understood these relationships and the binary code. There are very few people who can do all this today.

Recently a group of American scientists took the 64 basic formula relationships expressed in binary code and devised a computer that selects the correct formula and translates the results.



WHAT COULD THE I CHING COMPUTER DO FOR YOU?

The great leaders of history were superior people who let intuition guide them and took decisive action, often in the face of unsurmountable odds. We all have the same opportunity of being a superior person by letting ourselves recognize our intuitive or "gut" feelings and then taking action.

Often, just taking action achieves success. All too frequently, people go through life saying "Had I only done something." Indecision is to failure as decision is to success.

The I Ching concept puts us in touch with another dimension of ourselves—that of the superior person inside all of us. It permits us to let intuition or "gut" feelings play a more important role in our decision-making process, and finally, it puts us in touch with ourselves by letting us tune into ourselves.

You make most of your decisions based on available data. With little data, you make decisions based on intuition, so in these situations, the I Ching computer can be like a wise friend.

EASY TO USE

To use the computer, you just press the left button with your thumb. This starts a sequential generator similar to a roulette wheel which scans the 64 basic I Ching formulas.

You concentrate deeply on a goal or question: "Should I invest in the stock market?" "Should I accept the date?" Then you press the button on the right at the exact moment your subconscious tells you to. Each one of the sixty four formulas rotates in exactly 3 milliseconds (three one thousandths of a second), the exact time required for a human to respond to a signal from the brain through the nervous system.

The computer is a small (1½" x 2½" x 3½"), yet very sophisticated system using a double ion implant P-Channel MOS integrated microprocessor-type circuit. It generates and stops at a specific formula and interprets this formula through the binary code and a series of three lights—each with three different color combinations which are then easy to interpret.

You can use it as a helpful decision maker, as a party conversation piece or as a unique gift. We do not wish to make claims as to its effectiveness, but the fact that our company is offering this product is the strongest statement we can make about the computer and the validity of the concept. The system's accuracy will either send chills up your spine or end up as just another conversation piece. Could it be hundreds of years ahead of its time, or is its timing perfect? You can decide.

To order your I Ching Computer, send your check for \$29.95 plus \$2.50 for postage and handling. By return mail, you will receive your unit with complete instructions for interpreting the results and a one-year limited warranty. You also have a 30-day trial period. If you are not pleased with your unit, return it for a full refund including your \$2.50 postage.

Space-age scientists may have just discovered a way to read your subconscious and determine your probabilities of success through the use of a computer. Order your I Ching computer and find out at no obligation today.

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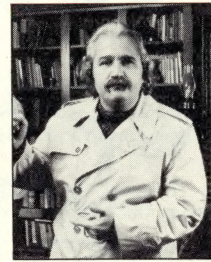
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The Cover: "Mate in Seventeen." Illustration by Seymour Chwast/Push Pin Studios.

Editor's Message

The staff of GAMES is celebrating Thanksgiving shamelessly early this year. Your response to our magazine has been nothing short of phenomenal. This, our fourth issue, is being read, cussed, fondled, played on, and used as a flyswatter in more than half a million homes. This is a happy moment for us.

One of the nicest aspects of publishing GAMES is that it is a two-way street, a shared experience—just like playing a game. And, in fact, the ideas and suggestions we've been receiving from readers have had a big impact on the magazine. We're discovering that our playing field is even wider and more varied than we had imagined. But it's going to take us a while to cover all the high spots. So if you don't yet see your favorite games and puzzles, we trust you will soon.

We had an exciting time putting this issue together. Our two men in Monte Carlo did quite a job on the World Monopoly Championships (page 10), and we're still pinching ourselves over the good fortune that brought us "Buzkashi" (page 16). One of our contributors has a new best-seller called *The Complete Book of Running*—can you guess who (page 56)? "Creeping up on Cryptograms" (page 20) and reviews of electronic games (page 41) come as a response to reader requests; so we now invite *you* to complete the circuit by inventing games that we can publish later on (contest, page 23). And we hope you enjoy our coverage of a rather rarefied pinball event (page 22), as well as the eight-page advertising section from the Bally Manufacturing Co. in honor of the national pinball championships. Not to mention the. . .

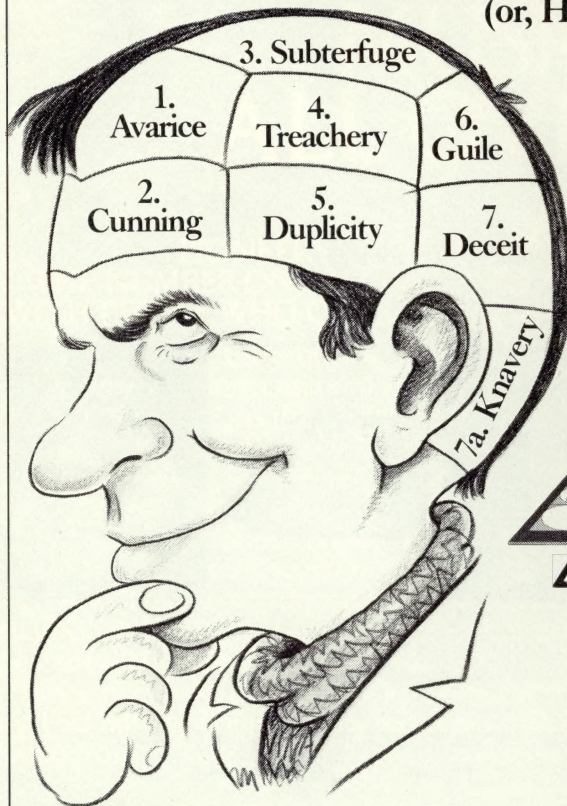
Yes, well, as you see, we get carried away . . . and we hope you do too. So let's continue our celebration, with thanks to you for joining us in our fun and games.

Michael Donner

Michael Donner

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(or, How to win by being absolutely rotten)



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GAMES

March/April 1978
Volume 2, Issue 2

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Subscription rate: \$7.00 per year in the U.S. and its possessions. \$8.00 per year in Canada and all other countries.

How to write to us:

Editorial Correspondence: The Editor, GAMES, 515 Madison Avenue, New York, NY 10022. All manuscripts, photographs, designs, and artwork must be accompanied by return postage and are submitted at the author's risk.

Reader Responses: Contest entries or correspondence related to specific articles in which readers are invited to respond should be addressed to: Name of contest or article, GAMES, 515 Madison Avenue, New York, NY 10022. Any material sent to GAMES Magazine in response to any invitation appearing in this issue will become the sole property of Games Publications, Inc. and may be published or otherwise disposed of in the absolute discretion of Games Publications, Inc. without further notice.

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Subscription Problems: Delores Valdez, P.O. Box 10146, Des Moines, IA 50340

To Change Address: GAMES, P.O. Box 10148, Des Moines, IA 50340. Please allow 6 weeks for change of address to take effect.

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LETTERS

On Go, Ennui, Etc.

I think you have set a bad precedent that will someday create a problem for you. I thought issue #1 was outstanding, but issue #2 is even better. How long can you keep improving on such an already distinguished publication? "Five'll Getcha Ten" took my money, but I restored my ego by solving "Evil Cerebral."

Dannie R. Mayes
Virginia Beach, VA

Oh, the ennui that stifles and lames
All agile-brained fellows and dames
When they sit down at night
With no puzzle in sight.

Then, along came that life-saver, GAMES.
B.J. Surisker
New York, NY

Deadlines Contested

I think all your contests should run the complete length of days that the cover states (in other words, from September through October, etc.). This would give people who pick up the magazine at a newsstand, as I did, a fighting chance to enter a contest. Otherwise I think you have a fine magazine, and I hope that it is around for a long time.

Paul Morgan
Tombstone, AZ

Your complaint is echoed by other readers and is certainly justified. But we have a thorny problem: if we extend the postmark deadlines by even a few days, the contest results will not become available in time for our own deadline at the printers. This means that readers would have to wait an additional two months to find out how they fared. Since there already is a lengthy delay (two issues, or four months), we feel we must opt for the lesser of the two evils. Subscribers have the edge, it is true.—Ed.

West Indian Wari Wrinkle

I was delighted to see the article on Wari (November/December), a game I have enjoyed ever since I learned to play it at a beachside bar in Antigua. When I bought the game to bring home, the instructions contained one simple rule I didn't find in those set forth in your article. It is: if, when you are sowing a lot of beans, you get back to the hole from which you picked them up, you skip that one and continue on until all the beans are sown.

H. Davison Osgood, Jr.
Portland, ME

On Othello and Go

For your information, the game of Othello was invented by a Japanese Go player, a fact that should have been included in Dr. Scott's review of the game (September/October). Othello may indeed be "an excellent game," but really, it owes much to Go. It was probably invented by Mr. Goro Hasegawa while he was fiddling with his Go stones in between games.

I haven't found an Othello player, let alone a Go player, who would seriously suggest that Othello comes close to Go in any of the categories rated by Dr. Scott. It is neither easier to learn, nor more difficult to master than Go. It is certainly no more "ele-

gant" than Go. An Othello set (pieces and board) certainly does not compare in aesthetic satisfaction with a Go set. I won't even begin to describe the enormous wealth of history and culture that is offered to the student of Go. Indeed, not even Chess can match that. How unfair it would be to ask it of Othello.

Anton J. Ninno
Syracuse, NY

Evil Cerebral

At last I have found the elusive Al B. Perlman (November/December). Not since *Intellectual Digest* went out of business have I found a logic problem I was unable to solve in less than 15 or 20 minutes without concentrating. It may take Mr. Perlman 100 hours to devise these gems, but I get many more hours of enjoyment solving them. I often correctly solve the puzzles once and then a few months later spend many more hours trying to re-solve them. I have often been wrong the second time.

Anne S. Donovan
North Kingstown, RI

Thank you very much for your "Video Vagaries" puzzle. Not only did it give me several hours of challenge but I was able to talk my logic instructor into giving me some extra credit points if I arrived at the correct solution and wrote a paper on this type of problem solving.

R.J. Wohlgenuth
Seattle, WA

"Video Vagaries" was very clever and great fun. I must comment though, that I didn't think much of your sample arrays [series of grids] for the "Pet Owners" introduction to logic puzzles in the same issue. I find it much simpler and easier to keep track of all the variables on one grid (using alphabetical abbreviations), especially when a large number of variables are present. As I go along through the clues I cross out each item that is shown to be incorrect and circle each one that proves correct so it will stand out. In this case I did not bother to put down abbreviations for all the movie names, song titles, etc., on the original grid, as they were harder to abbreviate, and I didn't think I would have any trouble filling in the one variable as I went along with just an extra note or so here and there. I suppose that my grid is more difficult to explain in writing than your several small ones, but I really think it is much more logical.

Mrs. Dorothy E. Lennox
Mentor, OH

The Language Game

Certainly with the mountain of quotations in the English language, something a little less ridiculous than "Love is of man's life a part; it is a woman's whole existence" could have been selected in the "Phrase-Maze" by Christine Foley (November/December). After working for a couple of hours on a puzzle, we deserve better than this chauvinistic dribble. My suggestion: "A woman without a man is like a fish without a bicycle."

Judith Sanders
Port Huron, MI

Byron's been misquoted in the "Phrase-Maze." The quotation should read: "Man's

love is of man's life a thing apart, 'Tis woman's whole existence." His words are a tribute to woman—her capacity for and expression of love surely sets her above man.

RH
New York, NY

We felt a responsibility to share both of the above letters. But we also feel that an entertainment medium like GAMES should transcend (we do not say "ignore") the burning issues of the "world." So if and when our slip is/drawers are showing, please laugh with us.—Ed.

Digging Diggery

The Amazing Bridge Exploits of Captain Diggery Piper bring a dose of much-needed class to your magazine.

Ruth Weiss
Wichita, KS

LAUNDRY BASKET

The rules of the game—it is a game, isn't it?—are: 1. If you find a mistake that affects the play of a game, or a significant error of fact, let us know. 2. If we agree we've made a mistake, we'll publish the first or most entertaining letter that points it out. (Though we're glad to hear from readers who discover even minor typos, we'll reserve the right to decide which slips need to be laundered.) 3. If we publish your letter in the Laundry Basket, we'll thank you with a GAMES T-shirt.

MISTAKES: NOVEMBER/DECEMBER

★ In the section of "Beguilers" on page 14, "How many triangles of any size are in this star?" you list the answer as "20, or if you look closely, 365."

Actually if you look very closely you'll find 367.

Ricardo Riga
Chomedey, Laval, Quebec

Yes, it is possible to count 367 triangles, though we weren't sure whether to count 2 infinitesimally small ones as triangles or just specks of ink. Hence the discrepancy.—Ed.

★ The first item in "Yard Sale," page 51, is quoted as \$60 in the article and \$300 in the price list.

Sam Dorfman
Wadsworth, PA

Galloping inflation?—Ed.

JANUARY/FEBRUARY

★ In problem 9 of "My Ten Favorite Brainteasers," page 16, it is unclear what you mean by "all nine of the shaded squares." I assume you mean the nine squares shown in figure 9b. Correct?

Mel Davis
Seattle, WA

Correct. For answers, see page 60.—Ed.

GAMES



Carol Jacobs, United States Othello Champion

SURPRISE OTHELLO STRATEGY UNVEILED IN WORLD TOURNEY

Carol Jacobs, of Alliance, Ohio, flipped her way to victory at the First National Othello Championships in New York last October 15th, and journeyed with high hopes to Tokyo the following week as the United States entrant in the World Championships. But there she fell victim to a baffling surprise strategy devised by Hiroshi Inoue of Japan. Inoue, thanks to this secret weapon, went on to capture the world crown in a closely contested finale with Thomas Heiberg of Norway. The Othello world has been scratching its collective head ever since. Jacobs explains:

In his book, *How to Win at Othello*, Goro Hasegawa (the game's inventor) outlined a winning strategy based on capturing a majority of the corner and edge squares on the board as early in the game as possible. This seems logical, since corner squares cannot be outflanked, and edges can only be surrounded in two directions rather than eight. It is an elementary principle to avoid those squares adjacent to squares you do not want your opponent to occupy (especially the row that borders the edge row and corners) to prevent him from "flipping" into it. With this in mind, all the players in the U.S. Finals (myself included) avoided the penultimate row like the plague, and occupied the edge and corner squares at the earliest possible opportunity.

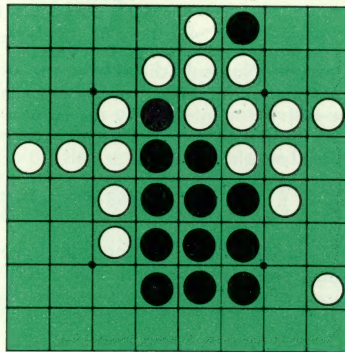
This "ideal" strategy was a disaster at the International Championships in Tokyo where Hiroshi Inoue introduced a startling and original approach to the game. He had discovered that in the early stages of the game the relative stability of the edge positions can, paradoxically, become a liability if one's opponent knows how to capitalize on the situation. He reasoned that since edge positions can only be surrounded on two sides, they are less likely to be recaptured by an opponent. This would leave the original taker stuck with those squares for the remainder of the game. Furthermore, the player who occupies edges will flip too many boundary pieces to his color (a boundary piece is one that is adjacent to an empty square), a move that will even-

tually reduce his flipping options.

Pictured below is the game for the World Othello Championship between Inoue and Thomas Heiberg of Norway. Notice that by position 27, White (Heiberg) has aggressively captured the two

51	31	30	29	24	25	33	43
52	50	32	16	17	26	42	44
48	47	6	3	9	21	20	14
18	11	2	●	○	12	13	36
46	45	7	○	●	5	15	35
53	54	10	1	4	8	28	22
55	56	60	27	23	19	39	49
58	57	59	38	37	34	41	40

H. Inoue (Black) vs. T. Heiberg (White)
Black to move first.



Position 27—White to move.

positions on the right-hand edge. If Black goes on the edge between White's pieces, White can immediately retake and retain control of the edge. White is also the only occupant of the left edge and can move into the bottom edge at any time. The exception is the top edge where White can only outflank Black by moving into an extremely precarious position adjacent to the corner. In the moves that follow, Black will take the top edge, thereby gaining an extra move on White. This forces White to take possession of the bottom and right edges in moves 34-38.

The weakness of White's edge structure becomes clear in move 39 when Black offers White the first corner! White captures the corner, but Black has controlled matters so as to have left the adjacent square open. Inoue now is able to wedge in and capture the remaining edges, most of the interior—and the World Championship by four discs.

Aggressive play may win in some games, but a defensive strategy that allows your opponent as few legal moves as possible is the new way to win at Othello.



NEW GAMES: "PLAY HARD, PLAY FAIR, NOBODY HURT."

The people at the New Games Foundation define a "new game" as one whose rules can be changed to make the game fairer, safer, and more interesting for the people who happen to be playing. Volleyball, for example, lends itself to lots of new games: the one where every member on a team must hit the ball before it can be sent across the net; the one where you rotate the server to the opposite team; the one where you score by counting the number of times the ball is hit over the net before it hits the ground. You can make a game new by changing the rules, or the equipment, or the number of people playing, or maybe by combining two old games.

The New Games Foundation, a non-profit organization which grew out of the first New Games Tournament in 1973, will resume its series of two-day play workshops the first weekend in March. Pack a picnic lunch, and plan on playing Tweezli-Whop, Hug Tag, Ooh-Ahh, and Slaughter. During the two days, you'll also make up your own new games, talk about what makes a game good, and on Sunday afternoon you'll put on a New Games Tournament for anyone in town who wants to come. The workshop fee is \$50; the tournament is free. For more information about the following schedule, write to the New Games Foundation, P.O. Box 7901, San Francisco, California 94120.

—R.S.

March 4-5

Los Angeles, New Orleans, Miami

March 11-12

San Antonio, Birmingham, Tampa

March 18-19

Dallas, Memphis, Gainesville

April 1-2

Houston, Nashville, Atlanta

April 8-9

Oklahoma City, Charlotte

April 15-16

San Diego, Indianapolis, Norfolk

April 22-23

Phoenix, Cincinnati, Washington

April 29-30

Los Angeles, Cleveland, Baltimore

BEHIND THE ORANGE DOOR AT GABRIEL INDUSTRIES

One snowy Tuesday in late November, publisher and editor visited the offices of Gabriel Industries overlooking Manhattan's Madison Square. We had been invited to play-test a mysterious new game scheduled for release in February—and that was all we knew.

We passed through the orange door leading to a small but well-appointed conference room, shook hands with our hosts, and before long a not-very-mysterious box was brought out, obviously containing The Game.

After a casual unveiling, we found before us a rather attractive, cleanly designed playing board and pieces.

Frankly we were a bit reticent. It was like being invited to someone's home, being proffered a surprise dish, and wondering where the elusive line between tact and honesty might lie. We were on the spot, and we said so.

In a matter of minutes we learned that "Touché" (as it is called) is a game for two played on a 5 x 5 grid; that a player wins by maneuvering four markers of his own color onto a straight line in any direction; that each player starts with a set of six pieces—one set round and, initially, white, the other square and red; that magnets beneath the spaces on the playing grid may (or may not) cause the color disk inside each piece to flop over to the opponent's color; that when a round piece is red, a square piece on the same space will always be white, and vice versa; that a play constitutes moving one square at a time in any direction, or leap-frogging as in checkers; and that either player when his turn comes up may move any of his own or his opponent's pieces already on the board.

It seemed moderately plausible as a game, if a little too contrived. But no matter, we came to play.

Editor lost first game to experienced host in about two minutes. Publisher won first game against another novice. Editor wondered whether effort required to memorize position of magnets was worth it. Publisher, having already had advantage of kibitzing editor's game, was unconcerned about concentration required but a bit dizzy from all the potential strategies.

Outwardly we remained noncommittal, but, in spite of ourselves, something was stirring inside. Next game, we played each other head-on: editor versus publisher (nothing new). Grand strategies were adopted and, as quickly, discarded; the hunt was on; confusion reigned; colors flopped: red, white, red; and of course editor whopped publisher. Publisher then soothed brooding ego by whomping novice again. The juices were flowing. The game was terrific. We noticed we weren't being noncommittal anymore.

After a very short hour, we had to go back uptown to our deadlines and budgets. As we were escorted out through the orange door, publisher remarked whimsically to editor, "I was expecting it to flop brown." —C.B. and M.D.

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☐ ☐ (3.) The value of all U.S. goods and services produced in one year is called the Gross National Product (GNP).

☐ ☐ (4.) If you have a savings account, own stock, bonds or life insurance, or are in a pension fund, you are an investor in the U.S. economy.

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Easter Egg Rolling on the White House South Lawn, 1938

EASTER EGG ROLLING: ALL DOWN HILL?

Easter Monday is an official holiday in Washington, D.C. Traditionally, its celebration includes the White House egg-rolling contest. The history of the contest's origins, its ups and downs and present status, provides a pointed commentary on our changing times. By following the course of events through the excerpted clippings below, you can form your own soft-boiled conclusions about where we and the eggs are heading.

1700—Scots celebrate Easter Monday by rolling oat cakes downhill.

1780—Scottish custom of oat cake roll is adopted and adapted in American South. Now it's egg-rolling.

1858—Washington, D.C. has its first official celebration of Easter Monday. Children from thirty-one Sunday schools parade through city from Smithsonian grounds.

1865—White House cancels first official invitation to Sunday school marchers because of Lincoln's assassination.

1872—Egg-rolling is included in Easter Monday festivities. Capitol Hill is official site of egg-rolling contest.

1876—Children are banned from Capitol Hill by congressional passage of Turf Saving Law. Egg-rolling is suspended.

1879—First Lady Lucy Webb Hayes invites hill-less children to egg-roll on White House South Lawn.

1888—Egg-rolling festivities are expanded. President Harrison personally wel-

comes youngsters at White House gate. 1898—President McKinley, cabinet members, and Ambassadors leave business of state to frolic with egg-rolling youngsters.

1925—The Coolidges are mobbed by 38,000 youngsters attending egg-roll. They retire reluctantly. Childless adults are banned from the event; children demand ten cents to help such adults gain entrance to grounds.

1930—Mechanical counters tally 48,567 egg-rollers. President Hoover mingles with crowd and is entertained by May-pole dancers.

1933—Extraneous entertainment is suspended by Eleanor Roosevelt. Egg-roll baskets are filled with hard-boiled colored eggs.

1939—Entertainment is back. Bands, magician, and puppets amuse crowd of 52,259. Children demand as much as one dollar for taking in childless grown-ups.

1941—Egg-roll is suspended due to War emergency in Europe.

1950—Truman continues egg-roll ban. Considers it a waste of food.

1953—Mamie Eisenhower revives egg-rolling. Three Eisenhower grandchildren attend event and party following. Children to bring own eggs. Eisenhowers mix with crowds.

1955—Security is tightened at egg-roll. Snow fence is built to protect President and putting greens from crowds. President speaks from South Portico.

1957—13,115 attend event. Eisenhowers vacationing in Georgia.

1961—Entire Kennedy family is away in Palm Beach. Picket fences protect President's putting green and Caroline's swing.

1967—Johnson family is absent for fourth straight year. Egg-roll has no organized games. Small crowds wait vainly for Johnsons to say hello.

1970—Nixons are away again.

1975—No Fords are on hand. 10,000 join in supervised plastic egg-rolling contest. Prizes are gold-plated pens marked "Gerald Ford 38th President."

1978—While no definite plans for the egg-roll exist as we go to press, the Usher's office believes plastic eggs will again be used this year. "Real eggs are just too messy."
 —F.W.

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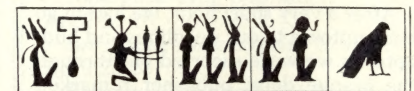
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THE PASTIME OF KINGS

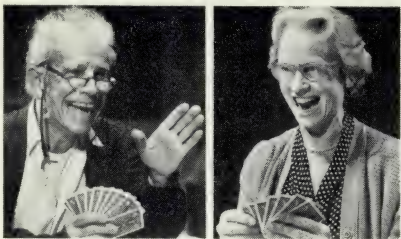
An authentic reproduction of the ancient Egyptian game of Senet makes its first appearance in March at the gift shop of the Museum of Fine Arts, Boston. A game of chance, Senet was played by kings and commoners alike, even presumably in the world beyond the grave (four models were found in King Tut's tomb). The modern edition, designed by Dr. Timothy Kendall of the Museum's Egyptology Department, consists of a full-color cardboard playing surface, fourteen wooden playing pieces, four stick-dice, and a twenty-four page illustrated booklet describing the game's rules and history. Priced around \$15, Senet is produced by Kirk Associates of

Belmont, Massachusetts in cooperation with the museum.

Dr. Kendall's account of the archaeological records from which he has reconstructed the game will appear in the May/June issue of GAMES, along with a full-color reproduction of the Senet board, complete rules of play, and the rich mythological lore that surrounds the game.
 —F.W.



From a Senet board dating back to the thirteenth century B.C.



Hume Cronyn and Jessica Tandy, partners in *The Gin Game*

THE GIN GAME

Broadway has another hit on its hands—gin rummy hands, that is. Hume Cronyn and Jessica Tandy (who are husband and wife) are delightful and excellent in D. L. Coburn's two-character play, *The Gin Game*, at the Golden Theater.

The play, directed by Mike Nichols, is very funny, yet is sharp and fascinating in its portrayal of Fonsia Dorsey and Weller Martin, two lonely people who meet on the dilapidated porch of an old people's home and become steady gin partners.

Most of the time on stage, they play gin rummy (a total of fourteen hands), and each hand is more exciting than the one before, since the gin games display the subtleties and manipulations in each character's personality and their touching yet tense relationship.

Interestingly, they use a stacked deck (weighted to court cards) to increase the potential for winning hands. When the script doesn't call for a particular card, they play what comes, so in addition to continuous dialogue and action, they must also concentrate carefully on every gin hand!

All in all *The Gin Game* deals a revealing, fun hand to the audience. Tandy and Cronyn intend to remain on Broadway through May. They then plan to take the play on tour to major U.S. cities, beginning next fall. Tickets for the Broadway show can be charged to major credit cards by calling Tele-Charge at 212-246-6740. Or send a check or money order to the Golden Theater, 252 West 45th Street, New York, New York 10036. Ticket prices range from \$8.00 to \$17.50. —J.J.

TO WHAT LENGTHS?

People who like to spend their time immersed in challenging crossword puzzles will enjoy *The New York Times 8-Foot-Long Crossword Puzzle*, produced and distributed by Reiss Games. The puzzle is really eight feet worth of the *Times*' daily crosswords printed side by side to look like one long puzzle and renumbered so that there are over 2,000 clues. The giant puzzle has been published in booklet form and opens accordion-style to its full length, but each section can be worked without opening up the whole thing. Answers are provided. The suggested retail price is \$3.00 and it is available in book, game, stationery, and department stores. Next thing you know they'll make an 8-foot eraser. —J.J.

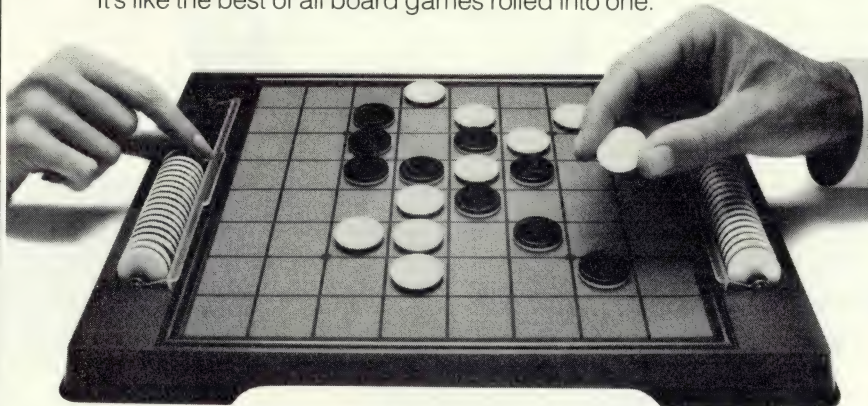
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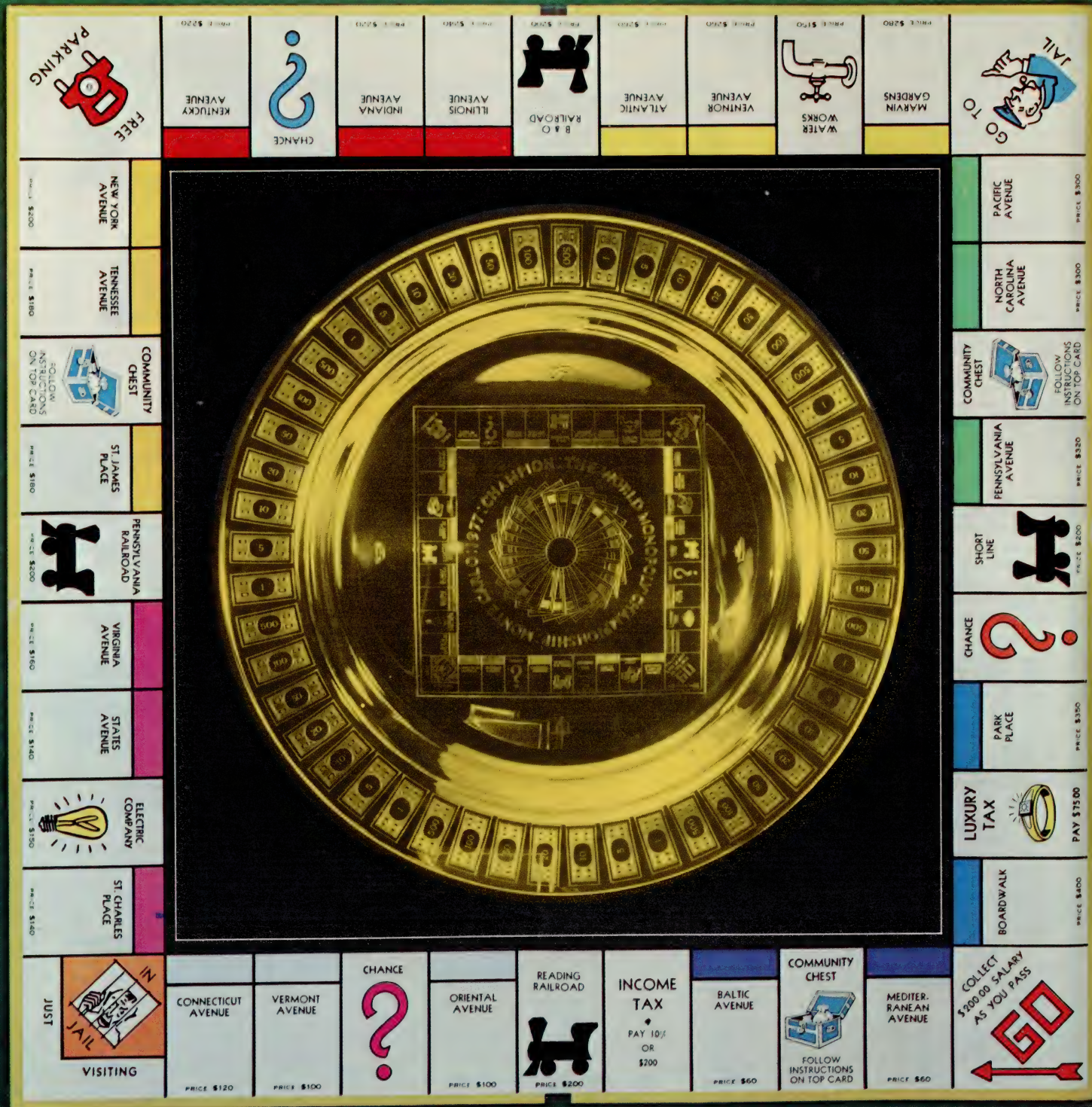
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THE WORLD MONOPOLY CHAMPIONSHIP

ADVANCES TO MONTE CARLO

by David C. Berliner
Photographs by Roger Verhulst





The World Monopoly Championship was meant to be purely fun, and wholesome, according to Parker Brothers President Ranny Barton. And what better setting to heighten the fun than Monte Carlo, where the roll of the dice is a source of national pride.

Not that Monopoly is all that wholesome or all that worldwide. The Russians think it's absolutely capitalistic, the Cubans find it downright mercenary, and a Californian had the un-American audacity to actually challenge Parker Brothers' priceless copyright in the courts with a competing little creation, "Anti-Monopoly." (He lost.)

But the Monaco showdown last October drew 20 contestants from 19 countries, dozens of representatives from Parker Brothers, its promotional subsidiaries and foreign licensees, and a horde of media folk, all delighted to be present at a happening worthy of inclusion in both *Alice in Wonderland* and the *Guinness Book of World Records*. Keep in mind that Monopoly is a game that fairly reeks with superlatives. And statistics.

Parker Brothers will tell you, in no particular order after stressing the remarkable fact that theirs is the "world's most popular board game," that they have sold a phenomenal 80 million sets in 40 years. That the game has been marketed in 27 countries and translated into 15 languages. That 2.5 billion of those tiny green houses have been "constructed." That in 1975 alone, at the same time that the U.S. Mint printed a respectable 22 billion dollars in honest-to-goodness money, the Monopoly presses inked out 40 billion in fake bills. That the game has been played in every conceivable surrounding (there is even a \$1,300 edition for underwater marathon play), and that sets are available in Braille.

Consider also that the longest recorded game with an unlimited number of players lasted 1,176 hours (49 days), the longest game played on the back of a fire truck burned on for 101 hours, and the largest outdoor game took up an entire city block (550 feet by 470 feet).

With such an unparalleled success to lean back on, Parker Brothers cheerily concedes that company officials initially turned down the idea for Monopoly when it was offered by its presumed inventor, Charles Darrow, in 1933. The

reason: "52 fundamental errors," the most grievous that it usually takes more than a tolerable 45 minutes to play a game.

And now, after two years of elimination tournaments throughout the world, Parker Brothers has laid out the bulk of the \$300,000-plus tab to bring everyone to Monaco.

If that sounds like a lot of money, weigh it against the fact that the company sells 5 million sets annually and that a mere minute of advertising time on American network television during that other World Series—the baseball version—costs almost as much. It was clearly a carefully considered business decision, but not without its share of good-natured smiles and an appreciation that everyone loves a successful "put-on" once in a while. And this was one "put-on" put on with expertise and gusto.

In Monaco, the contestants would each play four 90-minute games on American Monopoly boards. Five points were to be awarded to the winner of each game, four to the runner-up, three to the third-place finisher, and two to the last-place participant. At the completion of the four rounds, the five players with the highest point total would qualify for the championship playoff. If ties produced more than five finalists, the deadlock would be broken by a comparison of total monetary and property assets.

Multi-lingual bankers were assigned to each table. (In a competition where the shrewd trading of properties can spell the difference between victory and defeat, there was no margin for misunderstanding.) And new sets of serialized currency were provided for each game to prevent "accidental" infiltration of bills.

The first round gets underway with the firing of a starter's pistol at 9 on Monday morning, in the huge Salle François Blanc in the Centre d'Exposition Sporting across the street from the famed Casino. Seating has been arranged by random draw, with the succeeding three rounds designed to allow each player to face as many different opponents as possible.

At Table A, which, like the other four, is set off from spectators by a rope barrier, the American, Dana Terman, is seated with the representative of Singapore and the two female contestants, France and



Among the contestants, in some cases with descriptions culled from Parker Brothers' publicity releases, were: Bernard Nelis, 25, a prosecuting lawyer from Brussels, who had beaten 100 competitors in a championship tournament where "the standard of play . . . was very high and so was the tension, but [his] cool legal brain helped him to demolish the opposition"; Frederick Brown, 34, a draftsman and warship designer who "took the British title after a nail-biting final held literally on top of a nuclear reactor pile"; Greg Henkel, manager of a McDonald's eatery in Winnipeg, who survived elimination tournaments involving 7,999 fellow Canadians; defending world champion John Mair, 28, a Dublin, Ireland, merchant banker who arrived in Monaco with his lucky straw boater, sense of humor, and love of beer intact.

Also, Daniele Milet, a science professor who took the place of her husband when he could not represent France because of—imagine this—"an urgent business trip" (Daniele had finished second in the national tournament, Parker took pains to emphasize); Klaus Armbruster, 19, an able seaman, given special leave by the German Navy to take part in the championships; Birgir Isleifsson, 40, of Iceland, a department store executive and "very competitive bridge player"; Antonio De Luca, 29, of Naples, a bookkeeper who had topped 160 other Italian finalists; Caroline Papageorgiou, 24, of Monaco, a pharmacist and sports enthusiast who "enjoys art and poetry, particularly the 19th-century poet Verlaine."

And Chong Seng Kwa, 31, a sales executive from Singapore who was "looking forward to making his presence felt" (he did); Sergio Luis Martinez, 15, of Madrid, the youngest contestant; Anders Mikael Hellstroem, 18, an engineering student in Sweden; Wolfgang Honegger, 26, a pastry chef from Switzerland.

And, last in the national alphabetical order of things but first in the hearts of his countrymen and Parker Brothers, Dana Terman, 22, of Wheaton, Maryland, an assistant manager of an Arthur Treacher's Fish & Chips outlet, Master duplicate bridge player as well as U.S. Monopoly champion.



Left: Monte Carlo harbor provided a storybook setting for the tournament. Right: Hotel de Paris was home for many participants. Here, the ornate lobby.



At Table A in the first round, clockwise from left: Singapore (the eventual winner), U.S., Monaco, the banker, and France. Players faced new opponents each game.



Supporters and journalists watch their favorites as the tournament gets under way in the Salle François Blanc.

Monaco. With a miscalculation that is to haunt him by the time the tournament ends, Dana confides, "I'm not concerned about the Singapore player, but the women could be tough."

9:14—U.S. lands on Pennsylvania Avenue, giving him the three greens and the first monopoly of the game.

9:17—U.S. mortgages property to put a house on both Pennsylvania and North Carolina Avenues.

9:19—U.S. declines Singapore's offer to buy a property. Monaco offers Singapore a property; he replies, "It's no use to me."

9:30—France offers Singapore \$300 for Marvin Gardens to give her a monopoly on the yellows. He declines.

9:31—Thoughtful bargaining. Monaco and France speak to each other across the table in French.

9:32—Monaco lands on Pennsylvania Avenue where there are now two houses. U.S. collects \$450 rent and puts two more houses on each green.

9:36—Singapore trades, gets monopoly on light blues and constructs eight houses. U.S. has money piled neatly in front of him while opponents keep their fists clutched in their fists.

9:40—France gets yellow monopoly she has been seeking.

9:42—Singapore builds hotels on all three of his blues. He has also obtained the two purples with three houses on each and now dominates the first lap of the board.

9:55—The mother of the U.S. champion whispers to a reporter, "Things look good. The two girls are on the way out, I think. That Singapore guy has the luck of the Irish. He's missed Dana three times, but Dana just landed on his property."

9:57—Dana lands on Ventnor Avenue, but declines France's offer to buy one of her properties. Instead, he pays her rent by selling houses on Pacific Avenue.

10:01—U.S. down to \$25 cash and a series of mortgaged properties.

10:06—Singapore clearly in the lead.

10:07—U.S. lands on Connecticut Avenue and owes rent to Singapore. He offers to sell mortgaged Boardwalk to Monaco, noting that it would create a monopoly with the Park Place card she already holds. She refuses, then changes her mind. U.S. sells a house, takes Monaco's money, and pays rent to Singapore.

10:08—U.S. lands on monopolied railroads. His situation getting grim.

10:11—U.S. lands on railroads again.

10:12—France lands on Pacific Avenue and mortgages second of her three yellows to pay \$130 rent to U.S. Behind the rope barrier, Monaco's husband flicks his wife a barely perceptible hand signal.

10:13—*Meanwhile, at Table B, Britain has successfully bankrupted his tablemates. The win earns him five points and \$8,107 in assets.*

10:16—U.S. lands on Oriental Avenue and mortgages another house to pay

Singapore \$550 rent. He is down to a total of four houses on the greens.

10:23—Monaco lands on Pennsylvania Avenue and U.S. uses money to buy two more houses for greens.

10:26—Monaco lands on Singapore's light blues and goes bankrupt. Singapore immediately takes the two dark blues he has won from her and installs hotels on each property.

10:30—Another gunshot. Singapore has won. U.S. second, France third, and Monaco, sadly departed, fourth.

In addition to Singapore and Britain, the winners at the end of the first round are Switzerland, Germany, and the defending champion John Mair of Ireland.

Round two progresses smoothly. U.S. wins his game, bankrupting the defending champion and Belgium. Spain finishes second. Elsewhere, Singapore has won again and Monaco, Canada, and Sweden have bounced back with victories.

Dana's reaction: "I just played the hell out of that game. It was fun. I feel great."

That night, many contestants can be found at the stately old main Casino while others wander down to the quite new Loew's Hotel where the casino is obviously patterned after the noisier activity of Las Vegas.

The next morning, the third and fourth rounds are held. Because the U.S. is the third at his table to be bankrupted by Germany, he still receives four points. "This is a very good omen," Dana comments. "I couldn't have had a worse position and yet I came in second."

On the colorful scoreboard to one side of the hall, the entries disclose that Singapore has won again. Britain has captured his second victory, and Austria and Italy have entered the win column.

Round four is to be decisive. The U.S., confident and needing only a second-place finish to assure a spot in the finals, is instead the first to be bankrupted. Later, Alec Spiller, the easy-going South African with whom he has tangled during an amazing 35-minute, game-stopping trading session, analyzes the result: "The American did very well," he concedes during a post-mortem buffet lunch at the exclusive municipal indoor swimming pool. "But he had the cheaper set (Baltic and Mediterranean Avenues), with hotels developed early on in the game, and was able to block out everybody else because he had one of each property around the board—except for Boardwalk and Park Place. He therefore elected not to swap anything and was content to sit as he was, collecting rents, going around the board, and hoping to win by accumulating the most money." It didn't work.

The Final, a public relations spectacular rivaling Phineas T. Barnum at his show-business best, brings together the Irish defending world champion, Britain, Germany, Italy, and Singapore. Seated at a roped-off table in the Salle des Arts, the competitors play in the center ring while

the circus goes on around them. A closed-circuit television camera records the action and transmits it to monitors in the outer reaches. An announcer stands over the table and whispers a play-by-play into the microphone; his descriptions are translated into subtitles for the TV screens ("Germany in jail" . . . "Irish position weak" . . . "Italian position untenable").

In an adjoining room, a larger-than-life replica of the Monopoly board has been set up, and beautiful girls dressed in skin-tight T-shirts and even tighter pants recreate the movements on the actual board 50 feet away.

The final, however, is almost anticlimactic. Conservatism is the byword and, well into the game, there are no monopolies. No player dares trade for fear of giving an opponent the winning edge. Finally, after a 33-minute negotiating deadlock, the spell is broken. The yellow monopoly goes to Singapore, the green to Britain, the orange to Germany, and the dark blue to the defending champion. Only Italy is shut out and soon leaves the game. Britain and Germany follow close behind. The defending champion, realizing that his defeat is but a roll or two away, concedes. Singapore, an unknown at the outset and a 30-to-1 longshot with the tournament bookie, is patted, petted, kissed by his wife, hugged by the Parker people, interviewed, photographed, and given the top prize—a \$5,000 silver tray engraved with Monopoly symbols. There is no financial reward and no endorsements are planned. In fact, a Parker executive concedes, there are no plans for another World Championship "for at least a couple of years or more." To the five finalists go silver medals commemorating their participation.

"It's been an absolutely tremendous success," Parker President Ranny Barton says with a smile that radiates joy and relief. "That's primarily because of the fun and enjoyment everybody seems to have gotten out of it. The only serious people have been some members of the press."

"Obviously, a certain amount of luck went into the games, although I was surprised in the preliminary rounds by the consistency of the people who eventually got to the top. There is clearly more skill to the game than we had originally estimated."

In the midst of the celebration later that evening, a gala banquet at the opulent Hotel de Paris, U.S. entrant Dana waxes philosophical: "You learn more from losing than from winning," he says with a sigh. "If you win, then you already knew how to do it; if you lose, you apparently didn't. I played the last game poorly. I deserved to lose."

"But next time . . ."

David C. Berliner is a freelance magazine and newspaper writer.

Roger Verhulst reviews games for the Chicago Tribune.



Yellow Rolls Royce took defending champion John Mair from Nice Airport to Monte Carlo.



Larger-than-life, "live" recreation of the championship game.



The "unofficial" bookie, Victor Watson, chairman of the board of the British licensee, calculates the odds.



Chong Seng Kwa celebrates win with his wife and a "token" from the larger-than-life-size game.

TANGRAMS



A TANGRAM TEASER

by Fifi Weinert

Can you combine these seven simple shapes to re-create each figure in the landscape?



Trace the diagram above and glue the tracing onto a piece of heavy cardboard with rubber cement. Use a utility knife or scissors to cut the square along the center of the white lines. Accuracy is important. Lift off the tracing and remove the cement.



VERY LONG TIME AGO in China—so the story goes—a man named Tan dropped a square tile on the floor. It broke into seven pieces.

“Tan tried to put the pieces together again. But instead of a square, the pieces fitted together in the shapes of birds, sailboats, houses, animals, people—almost anything. Tan had so much fun making patterns with the seven pieces that he soon forgot why he wanted a square tile in the first place.

“When Tan showed his friends his seven-piece puzzle, they were delighted. They made seven-piece sets of their own from cardboard and made patterns for other people. Soon people the world over were making Tangrams.”—Peter Van Note in the book *Tangrams, Picture-Making Puzzle Games*.

While this tale of “Tan’s pictures” is clearly apocryphal, it is undeniable that the game embodies the Chinese adage: “In restraint is shown the master.” The creation of Tangram images requires an ingenious but-disciplined mind. No wonder the game’s enthusiasts have included Lewis Carroll, Napoleon, John Quincy Adams, and Edgar Allan Poe.

Traditionally, the game consists of a set of seven flat, straight-edged pieces, called “tans,” which fit together to form a variety of patterns—and a book of Tangram silhouettes. The object of the puzzle is to duplicate the illustrated silhouettes with the seven tans. All pieces must be used in each image and no tans may overlap.

There are, however, many ways to play that do not require the puzzle book. These include forming the pieces into an

object and letting friends guess what you’ve portrayed; illustrating a scenario; or creating variations on themes like barnyard animals.

Over 1,600 different Tangram silhouettes have already been published. The number of pictures that can be made with the tans is limitless. To begin your own explorations follow the instructions (above) for making a Tangram set. Then try to copy the patterns in the illustration opposite. Should any construction elude you, the solution to each of the patterns in the landscape will be found on page 62 in the Answer Drawer.

A book of Tangram silhouettes packaged together with a plastic Tangram puzzle is produced by Penguin Books.

Fifi Weinert is a contributing editor of GAMES.



Buzkashi

A Game from Central Asia

by Stephanie Spinner

photographs by Jim Sheldon

Legend has it that the Amu Darya (the Oxus River of antiquity), bordering the northern plains of Afghanistan, flows from the mouth of a lapis lazuli horse. This bit of lore was recorded in the seventh century by Hsüan Tsang, who may have been inspired by the beauty of the horses he saw as he traveled across Afghanistan. Bred for their great size, endurance, and spirit by nomads who literally lived and died in the saddle, these horses were famed throughout the East and much sought after. As Hsüan Tsang probably knew, they were prized by his own countrymen, who made the long journey from China expressly to buy them. If they were idealized by the Afghan nomads, as the legend suggests, it was with good reason; for they were indispensable and very precious.

Today, though sedentary farming has superseded the old nomadic culture, inhabitants of the northern plains recall their equestrian ancestry through a game that, in some ways, captures the essence of the proud Afghan spirit—*buzkashi*.

Though its origins are unknown, every Afghan has his version of how the game began. Some say it was played even before the thirteenth-century advent of Genghis Khan; others, that the great Mongol conqueror brought it with him; and still others say that it started when nomadic shepherds galloped after raiders of their livestock. But all agree on one point: it is a stirring, explosive, and dangerous game that makes real heroes of its winners.

Buzkashi, which literally means "goat-grabbing," is played with few rules. Two teams of horsemen vie to lift the carcass of a beheaded goat or calf (the *buz*) from a chalked circle (the *hallal*, or "circle of justice"). Once lifted, the *buz* is carried around a goal post at the opposite end of the playing field for one point, and then returned to the *hallal* for an additional two points.

Opposite page: Veering away from the pack, a Takhar chapandaz strains to grasp the buz (decapitated calf). This is no easy task, for the buz normally weighs anywhere from 70 to 150 pounds, and handling it requires great strength and balance.

In 1955, in an effort to make the game safer, the Afghan Olympic Federation imposed a list of regulations. Now there are referees who call fouls (hitting an opponent with a whip, or forcing him off his horse); the play is limited to an hour, with a ten-minute break at half-time; the playing field measures 400 meters square; and teams are comprised of no fewer than five and no more than fifteen players. This "clean" version is played annually in Kabul at the National Championship. It boasts the very best *chapandazs*, or master players, horses of unparalleled strength and speed, and is attended by thousands of ardent fans. Some feel, however, that the real *buzkashi* spirit, from days long ago when hapless prisoners of war were sometimes used instead of goats, and *chapandazs* routinely carried knives as well as whips, survives only in the northern plains.

Here, in the desolate vastness of Central Asia, Turkomans and Uzbeks, many of them direct descendants of Genghis Khan, play the game every Friday (and any other opportune time) from October to May. Wealthy Afghans sponsor special games to celebrate such events as weddings, circumcisions, or the birth of a first son. Unlike the once-a-year championships in Kabul, *buzkashi* is an integral part of life in the north, the playing season limited only by the horses' need for a good rest.

Northern *buzkashi* differs from the Kabul games in other respects as well. A typical northern game features hundreds, even thousands, of men on a team, rather than the regulation fifteen; a *maydan*, or playing field, that stretches for miles across the plains; and a medieval quality that no city game can boast. The spectator at a northern game may have difficulty convincing himself that he's still in the twentieth century; barring the occasional truck, there's almost nothing here that speaks of modern times—certainly not the enormous, dusty playing field, with its distant border of gray-blue mountains, nor the crowds, dressed in turbans, *chapans* (quilted robes), and pantaloons, conversing excitedly in high-pitched Afghan Dari. The arrival of the *chapandazs* only

reinforces the sensation of being transported to the Middle Ages—with their high cheekbones, slanted eyes, and leathery skin, wearing fur-trimmed astrakhan caps and high-heeled boots, they are a rough, imperious, and powerful-looking lot, with more than a hint of the Mongol hordes about them; and their enormous horses are even more imposing.

Because the value of a good mount in the game is inestimable, these horses are bred especially for *buzkashi*. Their bloodlines are matched with great care, and they are raised and fed more generously than the average Afghan peasant. Their normal diet consists of grain, raw eggs, and salt, and during the resting season, melons, clover, and butter as well. The colt destined for *buzkashi* will run free for three years. It will then undergo arduous training for another five or six, learning speed, patience, perseverance, and extraordinary responsiveness. A *buzkashi* horse must know how to gallop for miles at a time, and then come quite suddenly to a dead halt; how to dodge and how to attack; and how to respond accurately to the slightest pressure from its rider.

Naturally, all this training and care pays off: a good horse will play for twenty years, will never step on a fallen rider, and will automatically protect its rider by swerving away from collisions. As the Afghan saying goes, "Better a bad rider on a good horse than a good rider on a bad horse." Though horses are sometimes killed during the wilder games, human fatalities are rare, a tribute to the skill of the *chapandazs* and of their special horse trainers, the *mehtars*.

For the promising horseman, *buzkashi* training typically begins at twenty years of age. Initially he rides on the fringe of the pack and observes the techniques of the older players until he has sufficient confidence to join in. Regarded as *kohm* (not ripe) until their late thirties, it is commonplace to see fifty- and sixty-year-old *chapandazs* competing. These men are true professionals, "scouted" by the *beys* (rich men) who own the horses. Depending on his skill and manner of handling the horses, a *chapandaz* may be

commissioned by the game, the season, or, the most sought after contract, the year. The *bey* also supplies the better riders with a room in his home, as well as food, traveling money, and a wage of one to three thousand dollars. *Buzkashi*, like land, and gold, is a source of great prestige in Afghan society, and the *bey* will stop at no expense to secure the finest animals and riders.

The game begins when the *buz*, freshly decapitated, is deposited in a circle on the *maydan*. The *chapandazs* arrange themselves around the circle and a hush falls over the crowd. The *hakam maydan* (referee) blows his whistle, and the circle explodes into a maelstrom of flying hooves and whips, as riders push and jostle each other in their attempts to reach the *buz*. Their horses, trained to step on the *buz* so that their riders can reach down and grasp it more easily, bite and kick in their efforts to reach it, raising huge clouds of orange dust.

Suddenly a rider emerges, gripping the *buz* under his leg to safeguard it. He sets out for the goal post at a furious gallop, pursued by the entire company of thundering horsemen, who fight amongst themselves to overtake him and wrest the *buz* away. It's torn out of his grasp by an opponent, who in turn is forced to relinquish it to yet another rider. In the struggle, the *buz* drops to the ground. At this, the crowd is on its feet screaming "*Wardar! Wardar!*" (Pick it up! Pick it up!) The carcass is surrounded by a whirling mass of horsemen, who hang down from their saddles with astonishing acrobatic grace as they reach out to seize it. When it's picked up, the breakneck gallop toward the goal begins again. In an exhibition of breathtaking equestrian skill, the holder of the *buz* wheels, swerves, and dodges to elude the pursuing horde.

With luck and some help from his teammates, he manages to round the goal post to score one point. Then, without relinquishing the precious carcass, he gallops the distance of the field to redeposit the *buz* in the *hallal* for the final score. He raises his whip high to win recognition of his victory from the judges, who are usually retired *chapandazs*. The crowd, too, delivers its verdict, cheering and chanting the name of the winner so that it resounds over the plains. He receives his *salem* (prize) then and there, and rides off the *maydan* to wild acclaim.

The roar of the crowd dies away, another calf is beheaded, and the teams ready themselves for a second contest. Indeed, as long as there are sponsors to pay the prize money for goals, and riders with the spirit to compete for them, the game will go on, and the day will continue to yield up new heroes.

Stephanie Spinner is a freelance editor and painter who lives in New York.

Jim Sheldon, a globetrotting freelance photographer, was an intern at the International Center of Photography in New York City.



The chapandazs await the official pre-game salute at a special Nawroz (New Year's) match, held on the Dasht-i-Shedian (Desert of Happiness) in Mazar-i-Sherif.



A battle-scarred Takhar chapandaz (left) pensively returns to the second half of a fiercely contested spring championship game at Kunduz. Members of the Baghlan Province "cheering squad" prime their muzzle loaders (right) in anticipation of another score by their team. Team loyalty is overshadowed by the enthusiasm for a good game, regardless of the winner.



After a long day of fierce competition, it is difficult to control the highly strung steeds, and accidents occur more frequently. Here a chapandaz, clutching the buz under his leg, collides with a teammate.



A Kunduz steed with flying hooves rears up above the mêlée. This is a dangerous but popular stratagem for cutting a path toward the buz.



Evoking visions of Genghis' Mongol hordes, the chapandazs (left) thunder across the maydan, united by the single thought of scoring. Prizes given to outstanding players range from money to camels to clothing. Shahean of Kunduz (right) is quite pleased with the quilted chapan and bag of soap awarded him after the games.

Pencil Pointers

Creeping Up on the Cryptogram

by Norma Gleason

Ever try to solve a cryptogram, then give up the task as impossible? Did you wonder why you, who are good at word puzzles, should find a cryptogram difficult?

Cheer up. Perhaps it wasn't your fault at all. Perhaps it was just a bad cryptogram. Even an experienced solver might be frustrated by an improperly constructed puzzle.

Cryptograms are solved through recognition of inherent characteristics of the letters of the alphabet, characteristics such as letter frequencies and vowel positions that will be described in the solving tips below. If a novice constructor makes up a cryptogram that is too short, these characteristics are obscured, and so is the solution.

Suppose you have a short cryptogram, say a total of 35 letters, containing the two crypt words XPXBCZ ATF, and none of these 8 letters is repeated in any other word in the cryptogram. The two crypt words can decipher into BABIES CRY. Unfortunately, they also can decipher into IDIOTS RUN, ALARMS END, or DODGES TAX. The solver cannot determine which is correct since the letters are not repeated elsewhere.

If you have been bitten by such a cryptogram, no wonder you avoid them. But they really can be tamed to the point where they are fun to play with, yet not too docile.

A cryptogram should be between 75 and 100 letters in length, should use at least 18 of the 26 letters of the alphabet, and should contain not more than 4 singletons (letters appearing only once). Each time one of these rules is violated, a solver is further hindered.

Constructing a proper cryptogram takes time. First, a good text source must be found. (Personally, I like a smorgasbord of witty sayings and quotations interspersed with little nuggets of interesting information.) Next, the constructor writes out the plaintext he has chosen. He sits down with it (and, if he's like me, he takes along a mug of good hot coffee to clear the brain) and counts. He counts the total number of letters in the text. He counts the number of different letters. He counts the number of times each letter appears. He counts the number of singletons. About two times out of three he may find that he has to doctor up the text to make a fair cryptogram.

I'll not soon forget a struggle with a text about the cacomistle, a small animal related to the raccoon. In constructing my cryptogram I used the phrase RELATIVE OF THE RACCOON, but found the v in RELATIVE was the only v in the text,

and I already had too many singletons. I changed the word RELATIVE to COUSIN, then realized that having lost the v in RELATIVE I now had only 17 different letters rather than 18. Whereupon I blithely added the word KISSING before COUSIN, safe in the knowledge that I already had a K—only to find the G in KISSING was a new singleton. I was right back where I started! Rather than create an unfair text, I abandoned it and looked elsewhere for material.

Back to construction. Having worked out a fair text, the constructor enciphers it by setting up two alphabets, plaintext (A,B,C...) and cipher, and making the substitutions. Most constructors use a random mix of substitution letters for the cipher alphabet, although other (and more interesting) methods may be used.

The constructor may choose a title for his puzzle, one that will hint at its solution. Finally, he types the cryptogram, making a carbon copy, then solves the carbon copy as a check for errors.

Much as I hate to say it, there is no way a solver can recognize a good or fair cryptogram on sight, except in a very rough way—that is, if it has fewer than 12 words, it is probably going to be unfair.

An easy crypt, however, can be recognized: it will be fairly long, with several short words and several words that contain repeating letters. It will also have a title, and may offer a solving tip.

Devices used by the experienced cryptographer to add complexity to a fair puzzle include limiting the use of easily identified words, such as A, THE, and THAT; varying the frequency of the plaintext E; and avoiding words with repeating letters, such as PATTERN.

Our beginner's cryptograms on page 34 should convince you that these crazy mixed-up letters aren't as formidable as they may seem. With a little practice, and

the help of the following solving tips, you may even find the more difficult ones tame.

How to Solve Cryptograms

In the beginning you will probably use only the first five of these solving aids. Solvers ready to do more analysis will benefit from all of them.

1. Study the *title*, if there is one. It provides a clue. Refer back to the title as you solve; suddenly you may see the light.

2. If a particular cryptogram offers a *solving clue*, and you need one, use it!

3. Start solving with *short words*. Suppose a cryptogram has these three cipher words in it (not in sequence): BC WB CXBQ. Notice anything? Each word contains a B. The first and third words contain a C. Think. A two-letter word consists of a vowel and a consonant. Is B, C or W the vowel? BC is not apt to be AS, AN, AT, AM, nor IT, IS, IN, IF. Why? Because if B represents A or I, then WB would end in A or I—not likely. We guess that B represents O. Now look at the three cipher words:

BC WB CXBO
O- -O -O -

Let's assume that WB is TO, although it could also be DO, GO, or SO. BC could be OF, ON, OR. Try them all:

BC WB CXBO
OF TO F-O-
ON TO N-O-
OR TO R-O-

The first line looks promising, as FROM comes to mind. With that, we now have five letters identified to get our solving underway. Thus short words often give a solver the needed opening wedge.

Always study the short words in a cryptogram, comparing them with other short words, and seeking duplicated letters in different words. The ten most common short words, in order of frequency, are THE, OF, AND, TO, A, IN, THAT, YOU, FOR, and IT.

4. Check the *final letters* of the crypt words. Certain letters are more apt to appear in this position than others. In order of frequency as finals they are E, S, T, D, N, R, O, Y, F, and L.

A cipher substitute for plaintext Y is usually easy to identify. If it appears at all, it will have a frequency of only 1, 2, or 3 and appear only at the end of words. The principal exceptions are YOU and YOUR.

Its position as a final letter also helps to identify plaintext E. The cipher letter



"THAT'S THE EDITOR OF CRYPTOGRAM MAGAZINE!!!"

standing for E will be of high frequency, and will probably appear at least once as a final letter in any cryptogram. Check any reading material—rarely will you find a sentence without one word or more ending in E.

5. Look for *doubled letters*. Letters that often double, as the O in GOOD, are L, E, S, O, T. Any letter of the alphabet may be doubled, as the I in RADII, but the five given are the most common.

6. Take a *frequency count* of all letters in the cryptogram. This is a nuisance, but doesn't take long and is a great help in solving. The easiest way is to write out the cipher alphabet all on one line. Count the number of times cipher A appears in the crypt and write the number over the alphabet A, and so on.

Then compare with the following frequency alphabet: E T A O N I R S H L D C U P F M W Y B G V K Q X J Z

The letter with the highest frequency in the crypt is usually a substitute for E. If not E, then T, A, O, N, or I.

The vowels A E I O U Y provide 40 percent of ordinary text, and cipher substitutes for A E I O are, as a rule, high frequency letters in the cryptogram.

7. Look for *pattern words*. These are words that contain repeated letters in themselves, such as HOODOO or BANANA. The six most common pattern words are THAT, LITTLE, PEOPLE, WHICH, ALL, and TOO. They appear so often that expert cryptographers can recognize them on sight. If you see LUTL in a cryptogram, it is probably THAT. Of course, it could also be EDGE, HIGH, or some other word. Until it's solved, nothing's ever for sure in a cryptogram!

Some cryptogram fans make lists of pattern words for future reference. Words are listed by length and by pattern. Suppose you have a crypt word XPBW X. You turn to your list of five-letter words with first and fifth letters the same and find (among others) GOING, HARSH, KNOCK, CYNIC. You choose a likely candidate based on the frequency count for that cipher. For example, if the count is two cipher X's, six P's, eight B's, and two W's, then KNOCK is a more likely candidate than CYNIC. Why? Because if the word were CYNIC, the cipher P would decode to a plaintext Y and you would have six Y's in the crypt—not likely.

An Iowa couple, Eldridge and Thelma Goddard, began making lists of pattern words years ago. Eventually they wound up with 75,000 index cards of pattern words. They put this list into a paperback book called *Cryptodict*. It sells for \$4.25 and may be obtained from M. E. Dahm, P.O. Box 441, Marion, Iowa 53202.

8. Look for *reversals*. These are digraphs (two-letter combinations) in words of any length that appear as reversals. Example: BDZPXX and XDVVDB, where BD starts the first word and DB ends the sec-

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ond word. The cipher words turned out to be RECALL and LETTER. Common reversals in order of frequency are ER RE, TI IT, ES SE, EN NE, OR RO, ET TE, AT TA, ED DE, OF FO, AR RA.

9. Try to identify *vowels*. Vowels favor certain positions in words. In two-letter words, the first letter is most often a vowel. In four-letter words, the second letter is usually a vowel. In five-letter words the vowel likes to sit in the middle. Three-letter words have no particular favorite position for vowels.

Another way to identify vowels is by their adjoining letters. The alphabet contains six vowels and twenty consonants, so it's logical that a vowel will touch more different consonants than a consonant can touch different vowels. A cipher letter of high frequency that has different cipher letters on each side of it each time it appears is probably a vowel. Also, high frequency letters that contact low frequency letters are probably vowels.

10. *Repeated digraphs* also have relative frequencies in English writing. A repeated digraph such as SA in cipher words XBSA, SAR and SARP is likely to be TH, and the words could be WITH, THE, and THEY. Common digraphs in order of frequency are TH, HE, ER, IN, AN, ON, RE, AT, ED, ST, ND, and ES.

Use these solving techniques often and they will become second nature to you.

One caution: Don't rely on a single method. Say you have a cipher word PW. Don't assume P is a vowel (as in solving tip 9) solely because it appears as the first letter of a two-letter word. If, however, P also appears as the second letter in a four-letter word (tip 9) and is of high frequency as well (tip 6), the weight of evidence points to its being a vowel.

Cryptography has had its devotees throughout history for reasons of expedience or pleasure. In the Middle Ages, Charlemagne used ciphers to communicate with his generals. Mary, Queen of Scots, was beheaded after her cipher letters to French conspirators were decoded. Francis Bacon was a cryptographer for pleasure. The famous Zimmermann telegram, in which Germany offered Mexico part of the United States in return for Mexico's help, led to our entry into World War I, when British codebreakers intercepted and deciphered the message.

As suspense writer Peter Way says in his book *Codes and Ciphers*, "No one knows when man first began to communicate through verbal language, but it must have been not long after that he began to disguise plain language in order to deceive his enemies. And shortly after that someone else must have set himself the task of decoding the secret."

Norma Gleason, a freelance writer and puzzlemisth, is a member of the National Puzzlers League and the American Cryptogram Association.

Pinball has come of age in the United States. Long a part of European culture—as much a part of lunch in Paris as wine and cheese—it is only in the last two years that we have come to recognize that if a decade of sex, drugs, and rock and roll haven't corrupted our youth, then a little *Target Alpha* or *Captain Fantastic* couldn't hurt too much.

When Fiorello La Guardia took axe to flipper in the same spirit that prompted America to prohibit booze, he was far more effective than that other purge. Pinball was banned in New York City for 36 years, and became one of the most popular crimes of our era. Today, pinball packs about as much illicit punch as skateboards or Charley's Angels.

I wasn't thinking about pinball and culture on my way to play a nice friendly match with Roger Sharpe. I was wondering if my fingertips were too moist, if I should have worn sneakers, if I should have had another brandy; and I was wondering what Sharpe was wondering.

There are moments in pinball when you can break a machine, get so in touch with it that you are beyond score, in some realm of electronic communion where the ball never drops.

Roger Sharpe is a pleasant New Yorker, managing editor of a fashionable men's magazine and total pinball gonzo. When he agreed to this match, suggested by friends, he mentioned that he did not play guts pinball. Maybe not, but he's spent more time in more arcades in more cities than the gypsy lady who tells your future for a quarter. When we met at the arcade at 52nd and Broadway, he was decidedly at home.

I was ready. Two hours of practice at the local Puerto Rican luncheonette had convinced me that my flipping was strong and my timing on, my third-eye sense of ball movement near its peak. In short, Sharpe would have to be just that to stand a chance against me.

The format was simple. We would play best two out of three on six machines, one from each manufacturer represented in the arcade. Should we be tied in matches after those six, we'd play a tie-breaker on Chicago Coin's *Cinema*. The order of machines would be determined by blind draw. Our seconds (Lionel for Sharpe, Gina for me), would keep score, supply moral support and backrubs, and worry. My editor, who knows as much about pinball as I do about editing, supplied the quarters and watched over the proceedings as if observing a joust.

I drew Bally for the first round and selected *Night Rider*, a favorite machine of mine. There are moments in pinball when you can break a machine, get so in

SHOOT OUT AT THE ARCADE

Very Serious Pinball
by Joe Schick

touch with it that you are beyond score, in some realm of electronic communion where the ball never drops. I've had those moments with *Night Rider* and been rewarded with over 900,000 points. My first ball went out at 8,800. Sharpe started with a strong ball at 33,900, but we weren't loose yet. Ball two got moving and I went to 55,900 while Roger caught a dead ball to 34,900. The third and final ball took me to 62,240 and Roger to 38,470. I had taken the first game and picked up some critical information—Sharpe would be tough. His style impressed me. Fluid, agile, tactile, he kept the ball and machine in constant motion. He could dance with a pinball machine if he got hot enough. I play a more psychological game—I'll shake it if I have to, but would prefer to rely on will—the machine must bend to my desire, the ball is an object of my volition. I knew we had a long way to go.

Game two of *Night Rider* was all Sharpe. He added three balls and ended at 164,170 while I only bent 26-grand out of the game. One apiece. The third game was weak for both of us, but I held on to win with 35,530. Round one to me, and a cautious mutual respect between us as Sharpe drew for round two.

Segasa's *Prospector*, a Spanish game I'd never played. Sharpe eased through the first game, picking up tens of thousands of points on a side alley chute and turning gold and silver bonus points while I was digging for copper. First game to



Photos: John Storyk
The competitors before the match: Joe Schick (left) and Roger Sharpe

Sharpe, 331,000 to 135,000. Game two to me as I caught on to the chute and raised my metallurgical sights, 369,000 to 205,700. Game three and round to Sharpe with a brilliant 891,000 on two free balls and a gold bonus that would have shaken the International Monetary Fund. One round apiece.

Trouble. My blind pick on round three is Atari's *Airborne Avenger*, another game I'd never played. *Avenger* is a totally solid-state game with a playfield like a Raymond Chandler blonde—beautiful but deadly; you're finished, she wants to know when you're ready to start.

Sharpe picks it apart in game one, coaxing 142,000 out of it while my theory of the will is off playing skeeball. I'm disoriented by the large playing field and by the sound, which consists of a series of electronic squeals and blips instead of the familiar "ding . . . thunk" of conventional machines. But I know that like any other machine, it'll come across if you stroke it right . . .

In game two I get hot on the third ball and sneak by with 62,500. Game three is a moment of truth and on the third ball I go into hyper-space as the machine spells out words, spinners climax, and gates open as if by magic. At 194,000 the blonde and I pass out and I have the lead, two rounds to one.

Half-Time. Our seconds feed us junk food and inspiration. Sharpe and I are both happy and excited. We could stay here forever among the roasted peanuts and Italian Stallion posters locked in an eternal match. The arcade has everything we need, including a ripe teenager in tight black jeans and gold lurex top who's been hanging around the periphery as we play. In addition to the teenager, Sharpe and I admire each others mustaches, life styles, and mutual refusal to act our age. Towards the end of half time, I begin to think again about the match. Although I am ahead, it is still too close to call. I'm happy we're not playing guts pinball, since anything more would be apocalyptic.

Round four. Sharpe draws Gottlieb and chooses *Jungle Queen*. This pleases me. Gottlieb games are my favorites, solid and playable—they can be controlled. The antidote to the galactic madness of *Airborne Avenger*. I win the first game with a fair score of 66,000. I am carrying the match to Sharpe now. One more game and he'll have to work for a tie. Game two is another moment of truth. Double flippers fly, targets drop like it's the rainy season, and Sharpe scores 84,530. I play like I'm a tsetse-fly victim. The third game is more of the same: Sharpe breaks it open with 221,200 points to my 26,000. Round four to Roger and I notice beads of sweat on his forehead. He's hot now, *on*, in some special groove. I know it well and I'm worried for the first time, particularly since I've finished *Jungle Queen* like a catatonic.

Round five is fast. Sharpe goes into triple bonus on the first ball of Stern's *Pinball* and free-balls his way to 622,900 before I shoot. He is mopping his brow now, and before I can figure out the playfield on *Pinball* he's taken me out two games to zip.

Three rounds to two now and I must win Williams' *Hot Tip* to stay alive.

Our seconds offer final encouragement. I am trying to sweat and Sharpe looks like he's spent the last hour in the steam room with the Chicago Bulls. *Hot Tip* is a little sluggish but I squeeze 49,900 points out of it and take game one. Game two is all Roger with 60,000 on the first ball and a 108,000 total.

If Sharpe wins game three it's over. The arcade is quiet. There is a kind of intensity usually associated with climactic moments in sport. I come out gunning and the first ball is close. But Sharpe overtakes me with deliberate play and wins going away. He is hyperventilating and has lost two pounds. We have both played well; his victory is a credit to good training and perspiration.



"To me pinball is just a game..."

Although I am not discouraged by my defeat, friends worry about me. They may be concerned that I have transferred my life savings into quarters, developed callouses on my fingers, and run three miles a day. It may distress them that I've taken to cradling two stainless steel balls and have picked up Steinmetz on electricity to study bumper theory. They don't understand. To me pinball is just a game, a pleasurable pastime—winning isn't everything. But just in case, I am considering becoming deaf, dumb, and blind.

A word about Roger Sharpe. A gentleman and a fine competitor, he plays the game with the same skill and sensitivity that he writes about it. His book *Pinball!* is both beautiful and definitive.

Joe Schick works in the music business when he's not playing pinball or squash. He cites *Soupy Sales'* "Do the Mouse" as his major literary influence.

GAMES MAGAZINE CREATIVITY COMPETITION

Invent-Your-Own-Game Contest



First Prize Fidelity Electronics' Chess Challenger (reviewed on page 43).
Four Honorable Mention Prizes *The Mammoth Book of Word Games* by Richard B. Manchester, 510 oversized pages of fun with words.

The best of games are often the simplest. *Tag* and *Twenty Questions*, for example, rely on just a few easy rules, need no equipment, and can accommodate any number of players. *Tag* is a great fresh-air activity, while *Twenty Questions* is a boon for long car trips or a rainy afternoon among friends. Both games are naturals for spontaneous play.

The object of this contest is to invent an entertaining game for two or more players that requires *no props or equipment*. To enter, fill in the coupon below (or a reasonable facsimile) and attach it to a separate sheet of paper on which the rules and the object of your game are explained in a total of *100 words or less*.

Entries will be judged for originality, clarity of rules, and the degree of *fun* each game suggests. At right are sample descriptions of *Tag* and *Twenty Questions* (both under 100

words—the title is not included in the word count) which can be used as guidelines for contest submissions.

Twenty Questions. One player (leader) thinks of a person, place, or thing and announces whether it is "animal," "vegetable," "mineral," or some combination of these. The other players, in turn, ask the leader questions that can be answered "Yes" or "No." Based on his answers, they try to discover, within 20 questions or guesses, what he's thinking of. If anyone guesses correctly, that player wins; if not, the leader wins (but must reveal a satisfactory solution). Play continues indefinitely (or until a preset score is reached), with the winner of each round becoming the leader of the next.

Tag. Object: Not to be "It." As soon as a group (three or more—the more the merrier) decides to play, all players shout, "Not 'It,'" and the last one to do so is "It." "It" chases and tries to tag any other player. If he succeeds, he is no longer "It"; he announces "You're 'It,'" and the player who was tagged becomes "It." The new "It" must then try to tag any other player. (He may not immediately retag the prior "It," but must give him a moment to get away.) The game continues indefinitely in this manner.

Postmark deadline for contest submissions: March 23, 1978.

Mail coupon with description to:

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 GAMES Magazine
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All entries become the exclusive property of GAMES. No submissions will be returned. Void where prohibited by law.

Contest Results

FROM NOVEMBER/DECEMBER ISSUE

Metamorphosis

First Prize

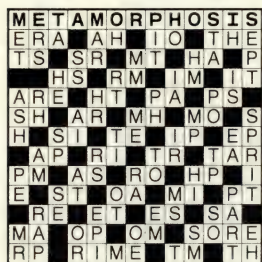
(Random House Encyclopedia)

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Mankato, MN
110 words, 122 letters
Postmark 11/12/77

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San Francisco, CA
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108 words, 124 letters
Ray Hudock
Edwardsville, IL
108 words, 122 letters
Mark A. Cavazos
Houston, TX
108 words, 121 letters



Winning Solution: Jean M. Paul

The harmless-looking 13 x 13 crossword grid (November/December, page 12) posed a stiff challenge. Fewer than a thousand readers submitted entries (as compared with the more than 7,000 who played Millionaire in the previous issue). But those who stuck with it found that Metamorphosis was not at all what it pretended to be. For one thing, it seemed only natural that long words would result in higher scores than short words. Not so! Since the challenge was to pack as many words as possible into the 169 squares, users of big words were at a distinct disadvantage. Once that was clear, the next question naturally became: "How short can you go?" The directions were clear: "Anything goes." Even one-letter words and abbreviations were allowed, much to the regret, we surmise, of some contestants. (We'd like to gear a future contest to total letter count rather than word count—longer words will be more challenging both to discover and interweave.)

By using the ten letters M, E, T, A, O, R, P, H, S, and I (all found as entries in Webster's Third) in conjunction with predominantly two-letter combinations, the skillful puzzlemisth could theoretically have achieved a total word count of 111. This would require a bare minimum of blank spaces, and indeed in the two best entries, there were only 47 such

squares carefully arranged in a series of parallel diagonals. Since the two leaders were tied in total word count (110) and in total letters (122), the winning entry was determined by its earlier postmark.

Flaws which led to the disqualification of potential prize-winning entries were: the re-use of letters which do not appear twice in METAMORPHOSIS (e.g. TEE), and the separation of parts of the solution from the starter word, METAMORPHOSIS, by a barrier of black squares.

—Contest administered by Jim Goddard.

Beyond Mother Goose

Our beloved Mother Goose (November/December, page 55) was in for a culture shock.

Called upon to rewrite a key line or two in four favorite nursery rhymes, many hundreds of GAMES readers did a spontaneous update on the Goose classics. Here's how they fared.

I. Curly-locks

Contest entries indicate that Curly-locks should forget strawberries and cream. Cholesterol counting and a scrupulous weight-watch are the order of the day. That is, if her sweetheart hasn't relieved her of housework solely to accommodate her full-time job. Alternately, Curly has been liberated from swine-slopping and dishwashing because her suitor is too poor to keep pigs, and only dines off paper plates. Our "Curly-locks" winner showed a gentler irony:

*Curly-locks, Curly-locks, wilt thou
be mine?
Thou shalt not wash the dishes
nor yet feed the swine;
But sit on a cushion, and sew a fine
seam,
And feed upon strawberries, sugar
and cream.
And hope that you never wake up
from this dream.*

Linda Milliken
Niotaze, KS

II. What are little boys made of?

What are little girls made of?

It appears that little boys have yet to shake the "snaps and snails" stereotype. "Grime and slime," "dirt on rugs," "sticky hugs," and a multitude of similarly detergent-provoking characteristics were cited. Little girls, by contrast, provoke amusingly rosy reminiscences: "ribbons and bows," and "twinkly toes," sound like the stuff dream-children are made of.

This was a particularly difficult verse to parody, requiring a single line substitution, internally rhymed. The winner in this category (who also captures the Grand Prize for Best Overall) supplied a very judicious set of recipes for making boys and girls.

*What are little boys made of, made
of?*

What are little boys made of?

*Snaps and snails and puppy dogs
tails;*

Energy, noise, and athletic joys;

And that's what little boys are

made of, made of.

*What are little girls made of, made
of?*

What are little girls made of?

Sugar and spice and all that's nice;

*Same as above, in these days, my
love;*

And that's what little girls are

made of, made of.

Walter O. Goddard
Salem, MO

III. There was an old woman who lived in a shoe . . .

Mother Goose's own grim little rhyme prompted some pretty grisly responses. The old woman had a multitude of bizarre options which included selling the children, cooking them up for supper, and abandoning them. On the lighter side, it was repeatedly suggested that she look for more commodious footwear, a boot, perhaps. Practical suggestions for a depopulated future were also proposed. The punsters ran rampant on this one. The old woman had clearly hooked up with a man without "sole"—her husband, that is, was a "heel." But our winner here, an unguarded optimist, predicts a happier solution to the old woman's population problem.

*There was an old woman who lived
in a shoe,
She had so many children she
didn't know what to do.
She gave them some broth without any
bread,
She whipped them all soundly and
put them to bed.
So she bought them guitars and
they all learned their parts.
Now the Shoe Family Band's at the
top of the charts.*

Cecilia Roberts
Sioux Falls, SD

IV. Peter, Peter pumpkin eater . . .

The case of Peter pumpkin eater is an intriguing one. Sympathies were torn between the spouses. Is Peter a tyrant? His wife a malcontent? Our winner was able to resolve their grievances with a liberated ingenuity any marriage counselor would admire.

*Peter, Peter pumpkin eater,
Had a wife and couldn't keep her.
He put her in a pumpkin shell,
And found he kept her very well.
He quit his job (just on a whim)
And now his wife is keeping him.*

Claire E. Lloyd
Wilmington, DE

A Webster's Third goes to Mr. Goddard, a year's subscription to GAMES for the four winners, and many thanks (no goose eggs) to all.

—Contest administered by Laura King Palmer.



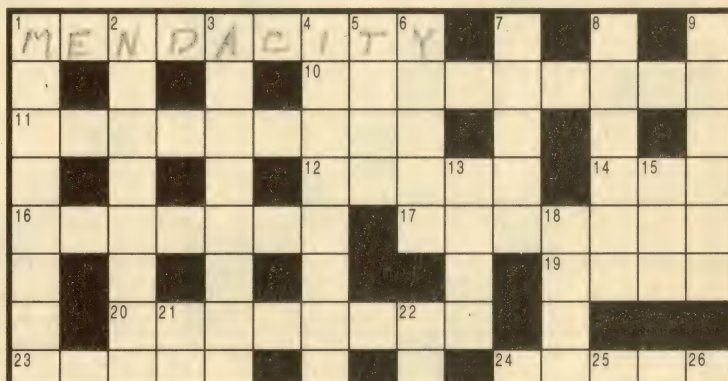
PENCILWISE

These 16 pages have all kinds of puzzles, easy and difficult, to help keep your mind from bagging at the knees. Answers on pages **62, 63, 64**.

Crossword à l'Anglaise

by Jack Luzzatto

Foiled by the clues? That's the fun of British crosswords. Although they often seem ridiculous, the clues usually provide specific directions. Follow them! Also watch out for puns and anagrams. For example, the answer to 1 ACROSS, MENDACITY, means "falsehood" but also breaks down into MEND A CITY, that is, "cure the metropolis." Numbers in parentheses after the clues indicate the number of letters in answer word or



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24A

actor (9)

40 Say praise for better salaries (3, 6)

33 Foot pound (5)

37 A frazzled aide should come up with a good one (4)

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FROM NOVEMBER/DECEMBER ISSUE

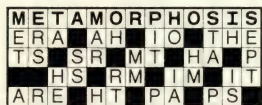
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by Jack Luzzatto

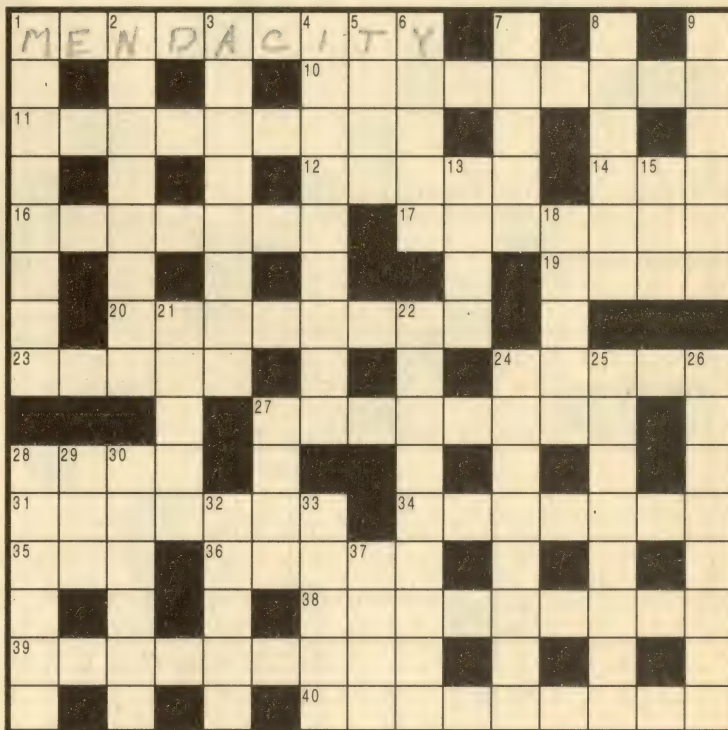
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ACROSS

- 1 Can falsehood cure the metropolis? (9)
- 10 Oils, in a confused sense, can make machines quiet (9)
- 11 Plead to be not impure (9)
- 12 Part of any long stocking (5)
- 14 Anything but the truth about the position of that golf ball (3)
- 16 The cad around the Italian city rebounded (7)
- 17 Condition under which the monster of the Loch may be seen (7)
- 19 Star in painting, music, dance (4)
- 20 One glass of German beer for the smart fellow! (8)
- 23 This girl is shy about us? No way! (5)
- 24 Outrageous fun doings are slap in the face (5)
- 27 Sad peace can make a wild caper (8)
- 28 Hercule took a hint and dropped the lady (4)
- 31 Would she toss a guest out? Only if upset (7)
- 34 A young doctor may enter in the hospital (7)
- 35 Tree, before and after the fire (3)
- 36 Language spoken as the French can? (5)
- 38 Jokes made by a lady's very first man (5, 4)
- 39 Inside supper for mere actor (9)
- 40 Say praise for better salaries (3, 6)

DOWN

- 1 Has claim to post money (4, 4)
- 2 Snoozes around the canal on table linens (8)
- 3 Any around, with an edge in small company, cause bitter talk (8)
- 4 Shifting dunes ain't swamps (9)
- 5 Get a theater award? Why not, in a comeback! (4)
- 6 Pay dividends or give up (5)
- 7 Steal a pretty one and end up in N.Y. pen! (5)
- 8 Don't let him give you a fast shuffle (6)
- 9 Has session to determine the taxes (6)
- 13 Mixed-up Nora found a town in Algeria (4)
- 15 Sit, though disturbed, for a cause? He would (3)
- 18 Diana is a good swimmer (5)
- 21 The cay has been rented (5)
- 22 I gain Mary, but only in my dreams (9)
- 24 And if a Santa appears, it's a wild dream (8)
- 25 Keeps from making songs (8)
- 26 Odd sexes can stay outside the prison if they pay the costs (8)
- 27 Sale of opera heroine doesn't make her the Bartered Bride (4)
- 28 Chaps who get about a thousand (6)
- 29 The sun comes back in part of L.A. (3)
- 30 Rushes upset members of the wedding (6)
- 32 Room at the bar, a busy joint (5)
- 33 Foot pound (5)
- 37 A frazzled aide should come up with a good one (4)



Scratch Sheet (You'll need it.)

Con-Sequential Spaces

by John Jonik

Determine which letter or number will correctly complete each of these sequences. Although the sequences may appear meaningless at first, each has a definite pattern that will lead you to one and only one answer. Hint: The first sequence throws a "curve," etc. Read about puzzles that aren't what they seem, on page 56.

1. OBSDCG ____

- (a) L (c) A
(b) Q (d) Y

3. NLFSM ____

- (a) X (c) R
(b) J (d) A

5. DLPBRKJ ____

- (a) H (c) G
(b) W (d) A

7. GCPBDVT ____

- (a) Z (c) A
(b) M (d) Q

2. 10 4 3 11 15 ____

- (a) 14 (c) 16
(b) 1 (d) 6

4. QPCTU ____

- (a) E (c) F
(b) R (d) H

6. MYISBETOG ____

- (a) L (c) Q
(b) O (d) F

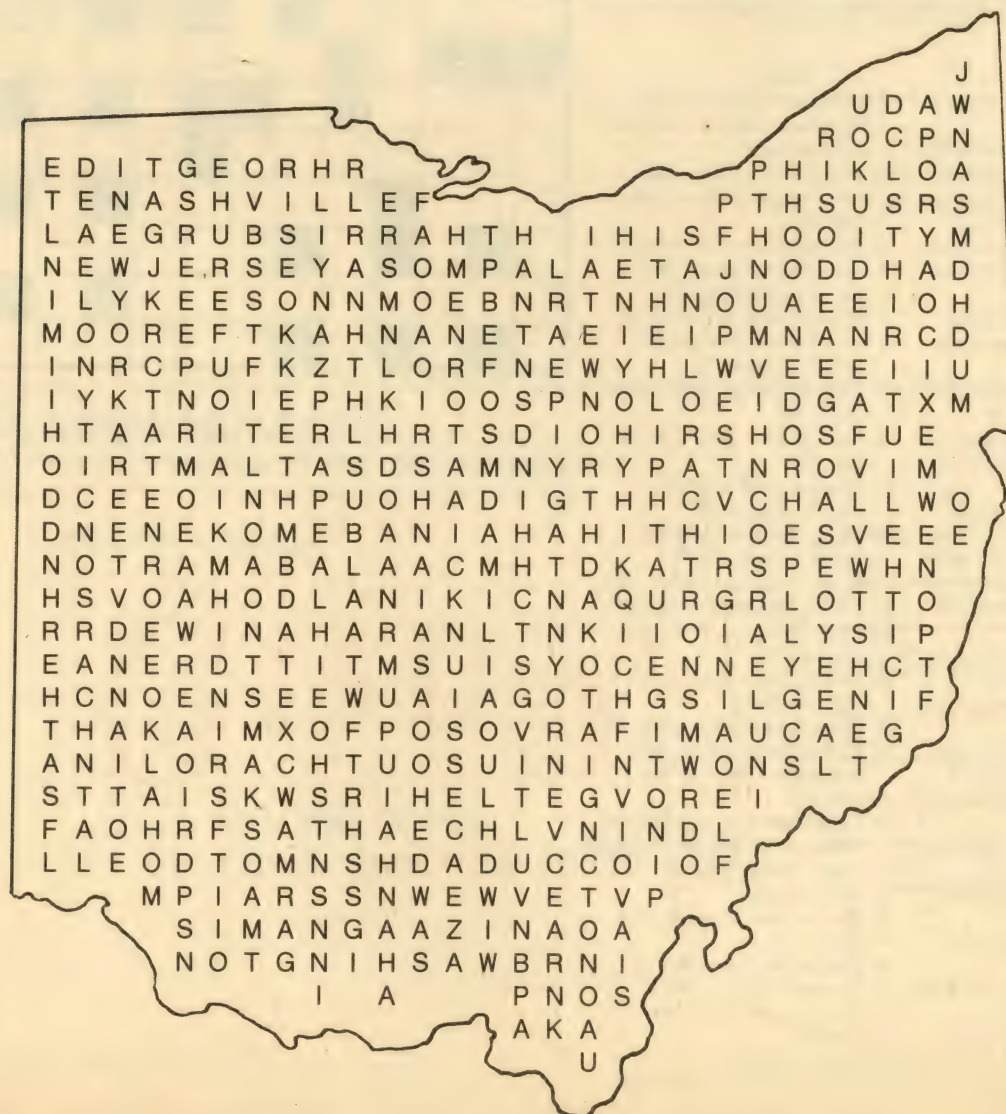
8. 16 4 9 2 3 ____

- (a) 10 (c) 8
(b) 5 (d) 7

State of the Union

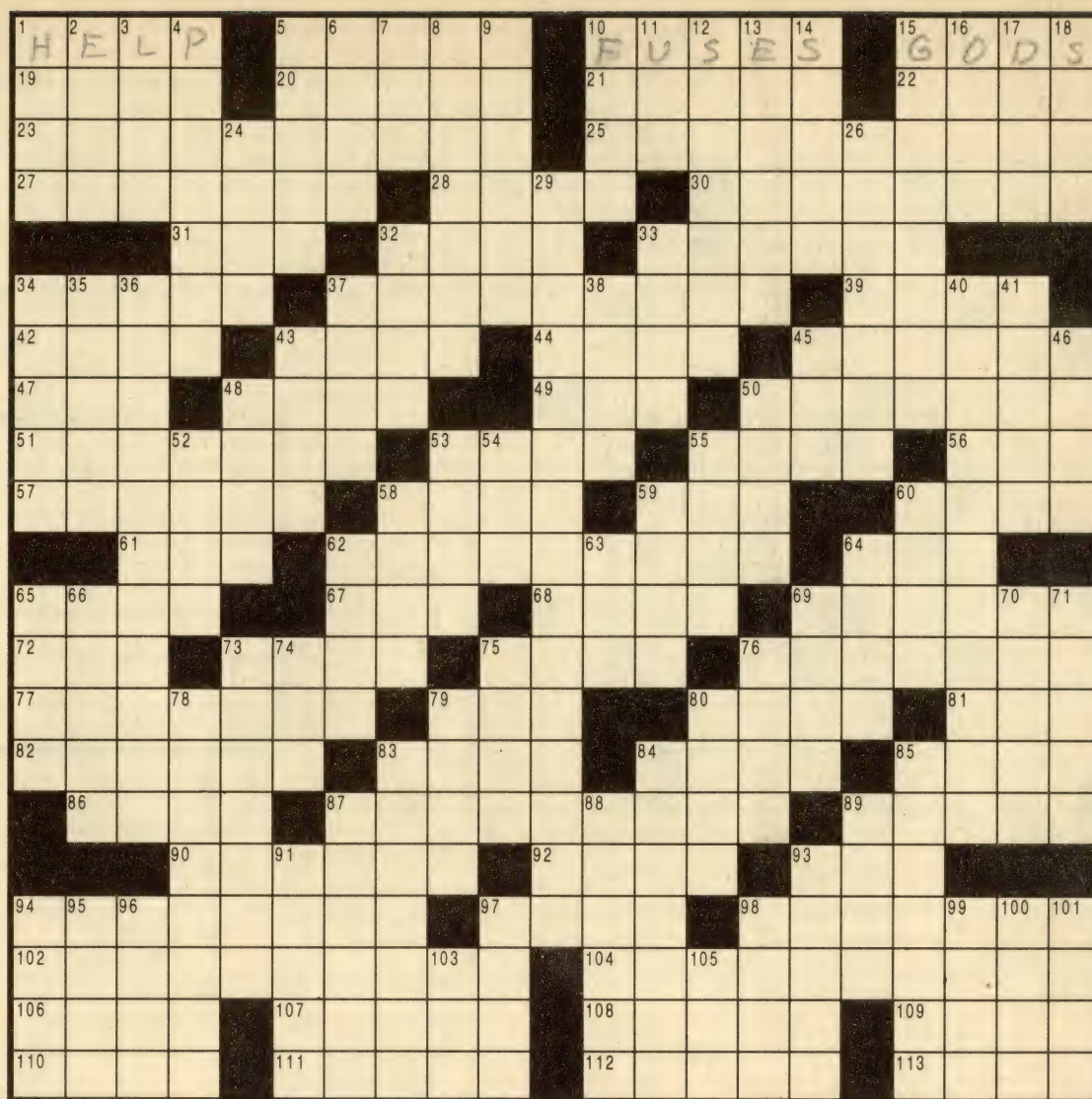
by Edith Rudy

Hidden in this puzzle are the names of 25 states in the U.S., and the 25 capitals of the states that are *not* in the puzzle. Words may appear in any direction—horizontally, vertically, diagonally, forwards, backwards—but always in a straight line. The puzzle outline is a clue to get you started. If you bog down, the states and capitals are listed in the Answer Drawer on page 63—separately from the completed solution which is on page 64.



Roll the Presses

by Bill Lutwiniak



ACROSS

- 1 Assist
 5 Hefty water beast, for short
 10 Circuit breakers
 15 Deities
 19 Adjective suffix
 20 Good-bye, amigo
 21 Verbal negative
 22 Composer Satie
 23 Geographical indexes
 25 Meaningful reference
 27 Foes
 28 News magazine
 30 Dime
 31 Helpful connections: Slang
 32 Bric-a-
 33 He signs others' autographs
 34 Old hat
 37 Ranch hands
 39 Race units
 42 Pilaf ingredient
 43 Chaise
 44 Endings for spat and scap
 45 Homes away from home

- 47 Ordinal ending
 48 Spades, e.g.
 49 Four-term pres.
 50 Word for word
 51 Child's two-wheeler
 53 Gridiron officials, for short
 55 Beats all
 56 "— Yankee Doodle Dandy"
 57 Coastlines
 58 Father
 59 To and —
 60 Optimistic
 61 Moon vehicle
 62 What a child reads
 64 Heel
 65 Chem. rooms
 67 Kitty
 68 Seductive
 69 Part of USSR
 72 Gold on the Spanish main?
 73 Snare
 75 Victim
 76 Brandy cocktail
 77 Toys, candy, etc.
 79 Discern
 80 Ashen

- 81 Census statistic
 82 An ulu user
 83 Horse halter?
 84 Pinball quietus
 85 Young Parisienne: Abbr.
 86 To be: Lat.
 87 Heavy dessert?
 89 Grandmotherly painter
 90 Usher
 92 Sea eagle
 93 Catcall
 94 Attacks
 97 —, a bone, and ...
 98 Sincere
 102 Daily reading matter
 104 The Bible, e.g.
 106 Great lake
 107 Mount climbed by 89 ACROSS
 108 Utter raucously
 109 Words of understanding
 110 Funny people
 111 Nuisances
 112 Alpine serenade
 113 War juggernaut

DOWN

- 1 Prodigious
 2 Verve
 3 Be indolent
 4 Postulate
 5 Loathes
 6 A bad day in March
 7 Horse for National Velvet
 8 Depict
 9 Legendary Irish bard
 10 Lose the bloom
 11 Swiss canton
 12 Zones
 13 Goes in
 14 Scorpion's attack
 15 Produce
 16 Algerian port
 17 Malicious gossip
 18 The — the limit
 24 Fork feature
 26 American wildcats
 29 Colonial primer
 32 The kid next door?
 33 Trepidation
 34 News establishment

- 35 Between gee and eye
 36 Texts
 37 Vibratory sound
 38 Legal degrees
 40 Weeklies, monthlies, etc.
 41 Hits hard
 43 Takes to court
 45 With it
 46 Assassinate
 48 Hold in check
 50 Defunct magazine
 52 Minerals
 53 Violent civic disturbance
 54 Do wrong
 55 Helen's home away from home?
 58 Plug up
 59 Crafty
 60 Talk wildly
 62 Health resorts
 63 It also gives you 14 DOWN
 64 Penal or area
 65 Theater section
 66 Cropped up
 69 Alluvial deposit
 70 U.S. bird
 71 Kilmer poem

- 73 Game-stopping phrase
 74 Antique car
 75 Exploited laborer
 76 Retailer's bait
 78 Maladies
 79 Open and —
 80 Muskellunge
 83 Deteriorates
 84 Citrus hybrid
 85 Bright at night
 87 Meat dish
 88 Peevish
 89 Additional
 91 Embrace
 93 Swiss city
 94 From the top
 95 Antitoxins
 96 Guzzle
 97 Sign on a sale item
 98 Raison d'—
 99 She was born free
 100 Viewed
 101 Star —
 103 Squeal
 105 Despondent

RightAngles

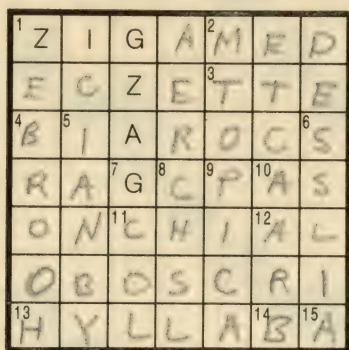
by E.R. Galli

RightAngles are a demented offshoot of the crossword puzzle, or word square, or something. Their special twist is just that—the entries don't go into the diagram in a straight line. Each word makes one right-angle turn somewhere along its length.

Clue numbers include a letter indicating starting direction: thus, 1E begins on square 1 by heading east, 1S begins on square 1 by heading south. The solver's task is to determine where each word makes its right-angle turn, and in which direction. Important: Each square in the diagram is occupied by a letter that appears in exactly two words, no more, no less.

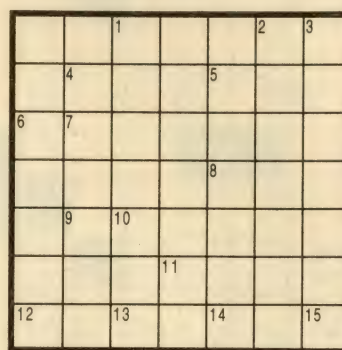
RightAngles #1 offers the actual words to be entered into the diagram. That's hard enough. But RightAngles #2 provides only the clues for the words to be entered. (Each answer word's length is given in parenthesis.) Crooked thinking helps.

RightAngles #1



- | | | |
|--------------|------------|--------------|
| 1E Zigzag | 6W Scorch | 12S Arcs |
| 1S Zebra | 7N Gazette | 13N Hobos |
| 2W Magician | 8N Creamed | 14E Bails |
| 3S Topically | 9E Passe | 14W Ballyhoo |
| 4S Bronchial | 10N Acted | 15N Air |
| 5N Ice | 11S Cob | |

RightAngles #2

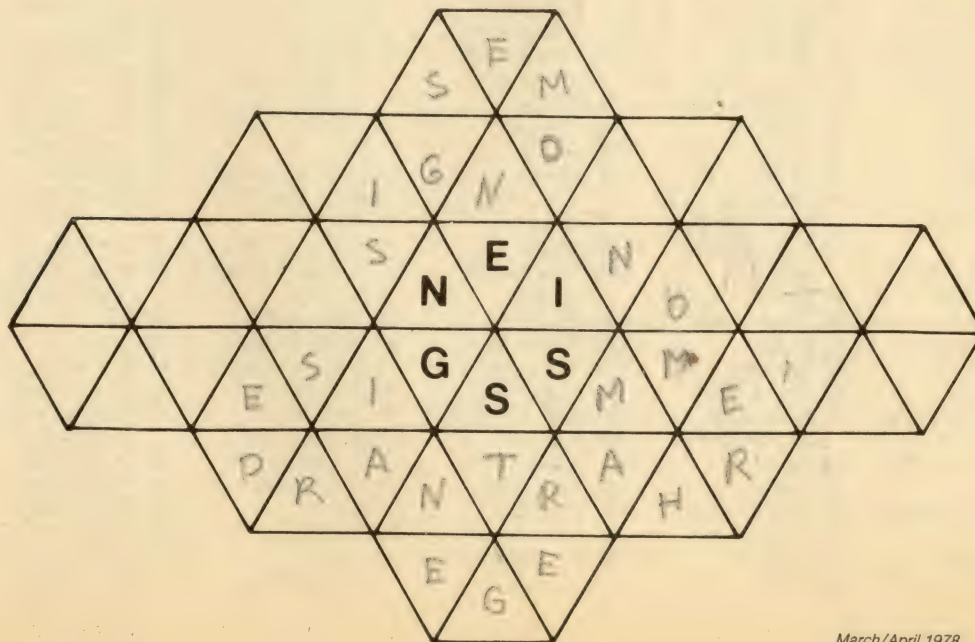


- | | | |
|----------------------------------|--------------------------------|--|
| 1W Figure of speech (8) | 5S Twit (4) | 10E Armada defeated by the English in 1588 (7) |
| 2W The Lone Ranger, e.g. (5) | 6N Chopped liver (4) | 11N Address (6) |
| 3W Recycled paper, long ago (10) | 7E First Franciscan's town (6) | 12E Born (3) |
| 3S Be litigious (8) | 8S Traveler's companion? (7) | 13E Idle talk (3) |
| 4E Twirler's meal? (9) | 9W Sackbut or euphonium (4) | 14E Player's game (4) |
| 4S Perfumed accessory (6) | | 15W Birdbrain (4) |

Word Hex

by Edith Rudy

The Word Hex puzzle diagram consists of 17 interlocking hexagons. Each of the six-letter words below must be fitted into the hexagons, overlapping wherever necessary. The words can begin in any triangle and can be written clockwise or counterclockwise. A starter word has been provided.



Similarities

by J.L. Wilkinson

ACROSS

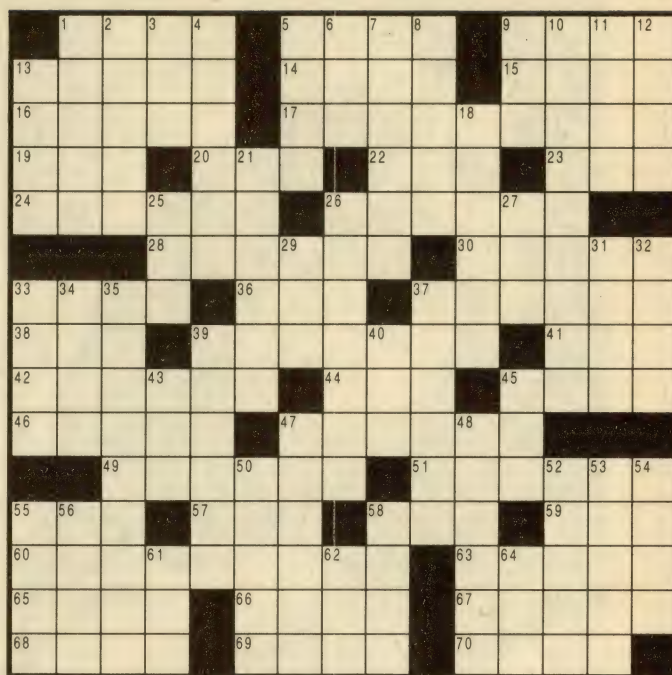
- 1 Kid's Christmas present
5 In addition
9 Rorschach test item
13 Tired and timeworn
14 Two of a kind
15 Count (on)
16 Reason
17 Whirlybird
19 Brew
20 Free (of) a nuisance
22 Water sprite
23 In addition
24 It grows on you!
26 Sofa
28 Edit
30 Less common
33 Risqué
36 Vehicle for a Venusian?
37 Distort
38 Lawyers' group: Abbr.
39 Sea creature
41 Hickory or Kinderhook
42 Shrine
44 Hawaiian food
45 Plant stems

- 46 Cubic meter
47 Putrefactive
49 Wanderer
51 Picasso, e.g.
55 Health mecca
57 Sailor
58 Back, away
59 And not
60 Mild
63 Glycerine explosive
65 Jai —
66 Gyrated
67 Motionless
68 Chromosome factor
69 Lady lobsters
70 Grant or Joyce

DOWN

- 1 Roman garment
2 Brew
3 Yale man
4 Court decision
5 Mimicked
6 Fall (behind)
7 Official seal
8 Planetary path
9 Bandeau
10 Mail receptacle
11 Butter imitator
12 Novice
13 Dross

- 18 DeMille's multitude
21 Persuade
25 Thirsty
26 Ice cream shoveler
27 Grain-bearing spike
29 Astern
31 She in Marseilles
32 Crimson and carmine
33 Ben and friends
34 Aid
35 Movie technician
37 Folk singer's accompaniment
39 Oleic acid salt
40 Tiny explosion
43 He plays for pay
45 Statute
47 Daytime blanket in Mexico
48 Sarcastic
50 Bog
52 Bury
53 Pitiful
54 Brisk pace
55 Doe's dear
56 Great soccer star
58 Bogs
61 Traditional dessert
62 Cask
64 Feminine suffix



Good News

by J.L. Wilkinson

ACROSS

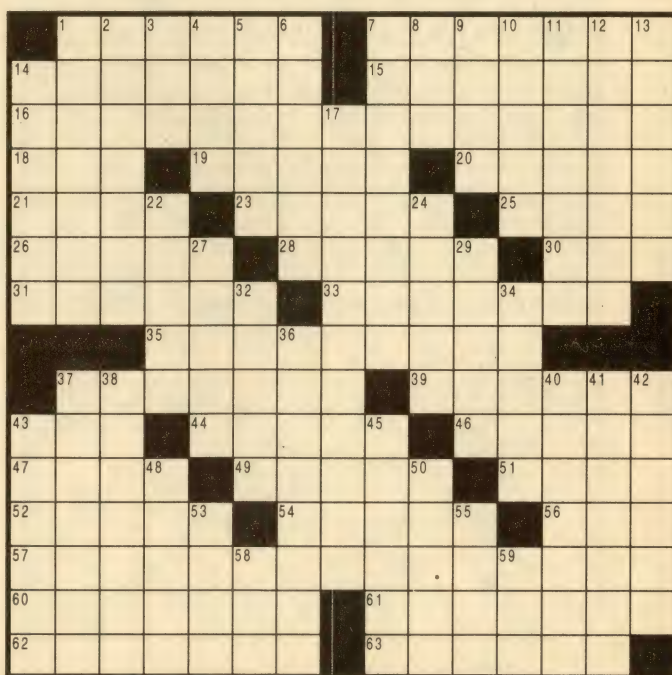
- 1 Equal (with)
7 Classifies
14 John Walker ran it
15 Corresponding part or segment
16 Perry White, e.g.
18 Edition: Abbr.
19 Of a certain space
20 Narrow groove
21 Buckeye state
23 Legerdemain
25 Scottish short story writer
26 December songs
28 Lowest bell in change ringing
30 Coolidge, affectionately
31 Main or easy
33 Rests
35 Big event for reporters
37 Opera star Munsel
39 Hits hard
43 Mongrel
44 Old violin
46 Caravansary
47 Black cuckoos
49 Break ties
51 Fate of iron

- 52 Remain in place, as a ship
54 Night fisher
56 Depot: Abbr.
57 Experienced newsman
60 Platform or dais
61 Meddles
62 Hunter who waits in readiness
63 Oculists or optometrists

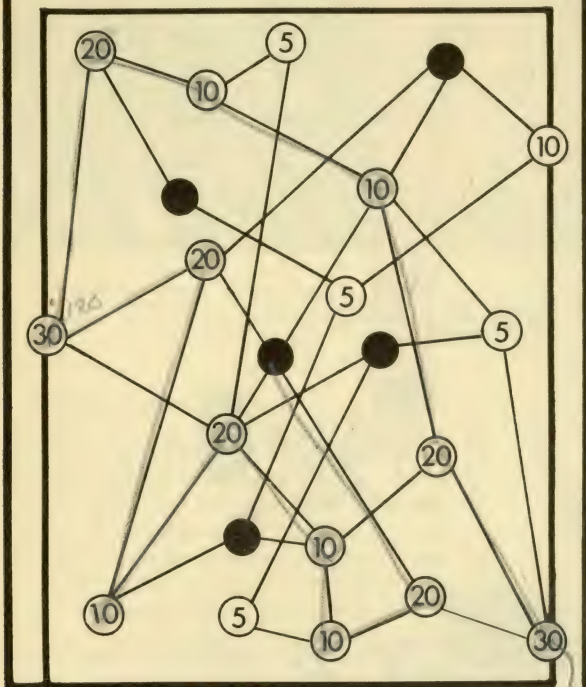
DOWN

- 1 Magazine appearing but once
2 Reporting more events
3 Coll. degrees
4 Surinam toad
5 Frighten
6 Reiterate
7 747, for instance
8 Compass direction
9 Turfs
10 Leaves out
11 Go back the same way
12 Three-horse vehicles
13 Seraglio

- 14 English lexicographer, or vegetables
17 Zealous cub reporter
22 Fragrant
24 Deals with problems
27 Cassandra, Cayce, and Dixon
29 Meanders
32 Taunts
34 A sloping person?
36 Stubborn receptionist, e.g.
37 Smallest and weakest
38 Short operatic song
40 Estate caretaker
41 Oriental
42 Hindu lutes
43 Young whales
45 Expunge
48 Rear end
50 Refund
53 Toward the mouth
55 Terminus for "all roads"
58 U.S. humorist
59 Engine turnovers, for short

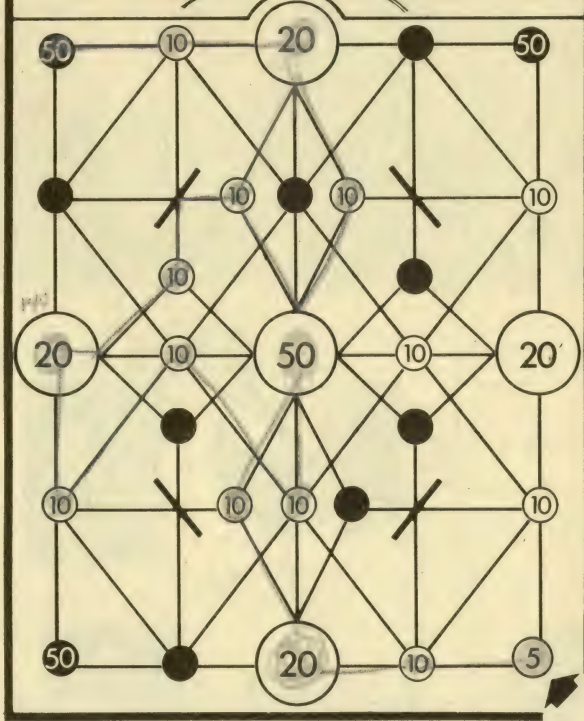


ATOM SMASHER



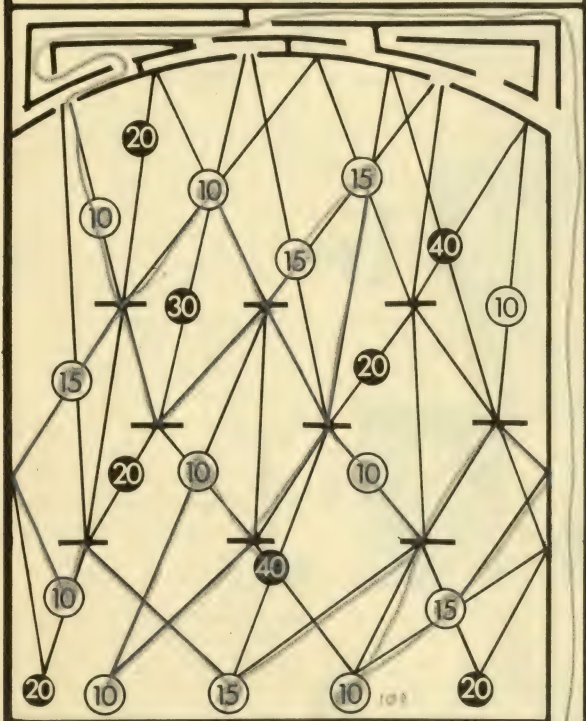
Follow the alley from the starter arrow and enter at any one of three points. Best score: 215.

BIJOU



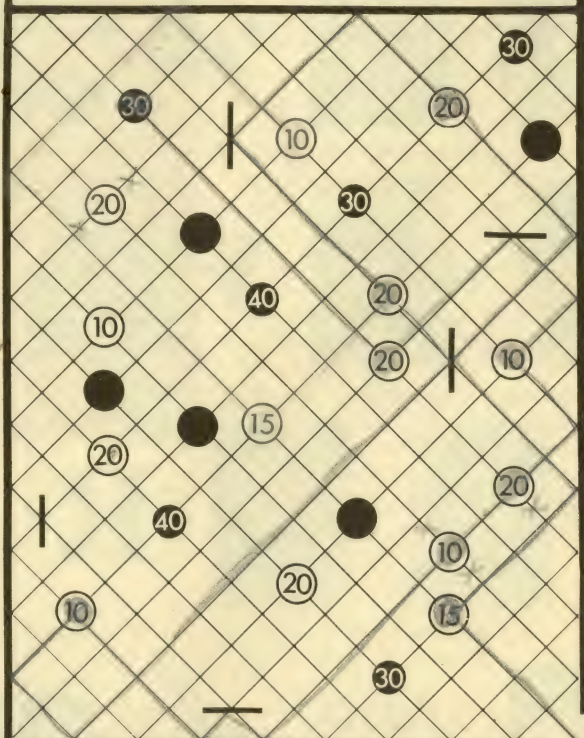
You may either pass through or ricochet off the large circles just like the small ones. Best score: 295.

RICOCHET



Each of the three entrances at the top presents two options, but once in play you may not return to any entrance. Best score: 185.

SIMPLE SIMON

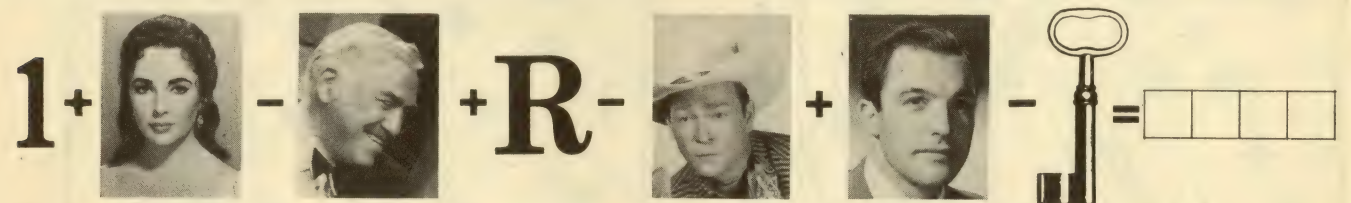
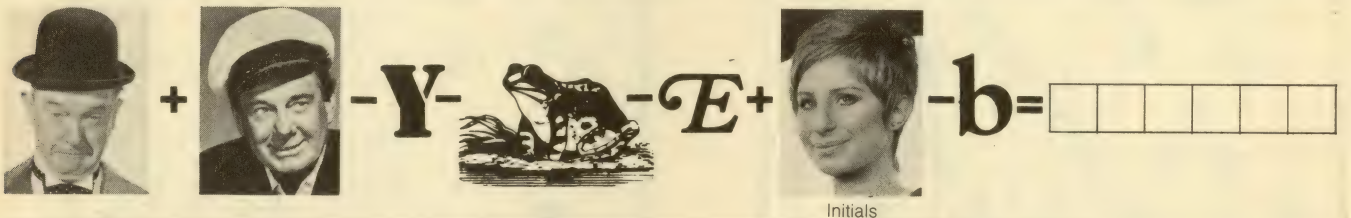
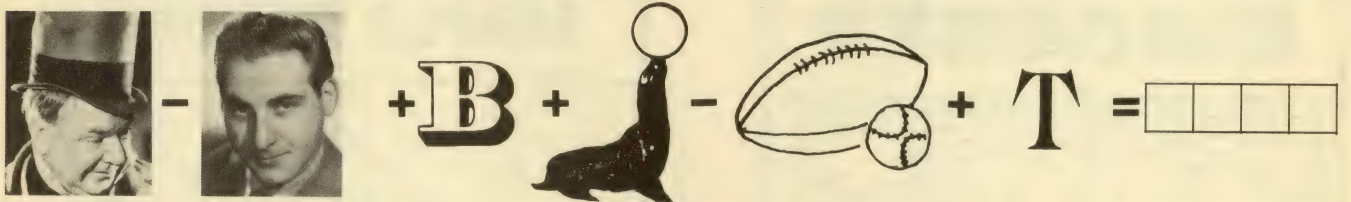
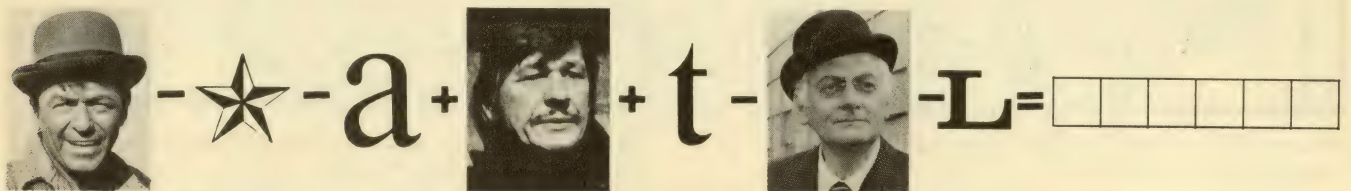


Go for the bumpers and sidewalls on this one. Best score: 155 (with 19 bounces).

by Len Fellows

$$3 - \text{tree} + \text{tennis racket} - b = ?$$

A 5-foot, 9-inch woman from Denton, Montana, has a twin brother in Chicago who . . .

[illegible]

PINBALL!

ARE YOU GAME?

by Roger C. Sharpe

There's a new game in town. Well, maybe it's not *that* new, but suddenly everyone seems to be discovering pinball. And if you don't believe it, just look around. Where once there were none, arcades now thrive. Crowded bowling alleys and taverns now magically have the space for at least one machine. The local candy store and bus station offer an area for games, even shopping malls and hotels feature game rooms, and the list goes on. Look beyond closed doors: basements, rec rooms, and dens can be seen sporting their new additions as pinball machines find their way into the home. But why all the excitement?

After all, they are only machines. But then maybe this is part of the allure of pinball for this mechanized, computerized, and digitalized era. Begging to be pampered and coddled when we play them, pinball machines offer much more than what meets the eye once hand touches plunger. It is a fantasy world of flashing lights and ringing bells that beckons to us, a reality strewn with such entities as thumper bumpers, drop targets, kick-out holes, spinners, roll-overs, and, of course, flippers.

For the player, pinball is the subtle test of man versus machine. Human being caught in combat with human invention. We are asked to bring to the games our guile and agility in mastering the steel ball through an array of dynamic potentialities that changes from machine to machine. And what do we ask of it? An extra ball . . . a free game . . . a score higher than we've ever attained before. Small rewards admittedly, for such a noble endeavor.

The way any of us play is an accurate measure of our ability to succeed. An accomplished player will *sense* the subtle differences between various machines and turn it to his (or her) advantage. He'll approach playing as an art form that goes beyond just a mere test of wills, and

know just how much to nudge the game while also gauging how much "give" exists without tilting the machine.

If the flow of the game demands a certain direction, the skilled player will go with it and not against it. This is no simple matter, for there is more to know about playing a particular game than can be discerned from reading the directions



at the lower right of every machine. There is always that intangible quality that borders on the instinctual rather than just a reliance on hand and eye coordination.

And, as is their wont—just when we think we have them, know all their secrets—the games can turn on us. One spectacular ball is rapidly followed by four forgettable ones, and a favorite machine becomes a constant nemesis. And maybe that is the appeal of pinball, the universal fascination that has thrust the games into the public eye as never be-

photographs by James Hamilton

fore. We can simultaneously be excited and frustrated by an action of our own control, and from moment to moment the feelings change, with only the love of the game spurring us onward.

If you don't believe any of this, and if all the images and words seem too obscure, maybe something written almost four decades ago can better explain why pinball has endured. The work is *The Time of Your Life*, a play by William Saroyan, and one of the central characters is Willie the marble game maniac (as Saroyan describes him).

"He [Willie] pushes down the lever, placing one marble in position. Takes a very deep breath, walks in a small circle, excited at the beginning of great drama. Stands straight and pious before the contest. . . . Willie vs. Destiny. His skill and daring vs. the cunning and trickery of the novelty industry of America, and the whole challenging world. . . ."

In Act V the climactic moment approaches as Willie plays. "Willie is thrilled, amazed, delighted. EVERYBODY has watched the performance of the defeated machine."

But it is Willie who explains the feeling of accomplishment. "Took me a little while, but I finally did it. It's scientific, really. . . . I just don't like the idea of anything getting the best of me. A machine or anything else. Myself, I'm the kind of a guy who makes up his mind to do something, and then goes to work and does it. There's no other way a man can be a success at anything."

And now, as then in 1939, the motivation hasn't changed that much when it comes to playing pinball. And for those masters of the flip and nudge, that's the most important thing of all.

Roger C. Sharpe is managing editor of Gentlemen's Quarterly magazine; and the author of Pinball! (E.P. Dutton), photographs by James Hamilton. James Hamilton is staff photographer for the Village Voice.

THE ART OF THE MATTER



Roy Parker is one of the great heroes of the pinball business, and yet his name is virtually unknown outside the industry (until now). It has often been said that exciting artwork on the back glass attracts players to a machine and that exciting action on the playfield will hold them. Well, as an artist who drew some of the best back glass designs of all time, Roy Parker must have attracted more people to the game than anyone else in pinball history.

In the 1950s Parker's artwork created visual stories with a satirical, almost comic-book outlook on life. His themes were sometimes outlandish, but the messages he was trying to relay always succeeded in their primary objective: They caught and held the eye of the passing player. The deceptively childlike simplicity of his style never failed to get a player more involved in the pinball game before him.

When he died in the mid 60s, many felt that pinball graphics would never again have the impact they once had when Parker was alive and active. But Bally saw to it that pinball art would once again achieve its place of importance by staffing their own personal art department. And it is the work of Dave Christenson (*Ro Go*, *Fireball*, and *Capt. Fantastic* to name just a few) and Paul Faris (*Night Rider*, *Quarterback*, and *Evel Knievel*, three of his standouts) that have once again rekindled the excitement and unique freshness of pinball art.

Dave Christenson said it best when he offered these words about pinball graphics and what they're all about. "Since Roy Parker died, there hasn't been truly outstanding artwork on pinball machines. I think his work epitomized what pinball art *should* be. He drew girls who always looked like they'd just stepped out of a "Terry and the Pirates" episode. But when Roy Parker stopped, the sexuality went out of pinball back glass art. The machines switched to kid stuff, like circus themes. I'm trying to change all that."

Along with Paul, he's succeeding.



ONE FOR THE RECORD

Have you ever wondered how long someone could play pinball without totally *flipping* out? Well, wonder no longer. The sanctioned record as submitted to the *Guinness Book of World Records* belongs to 19-year-old Bruce Condella of New Jersey, who played Bally's *Evel Knievel* for 93 hours and 30 minutes without stopping.

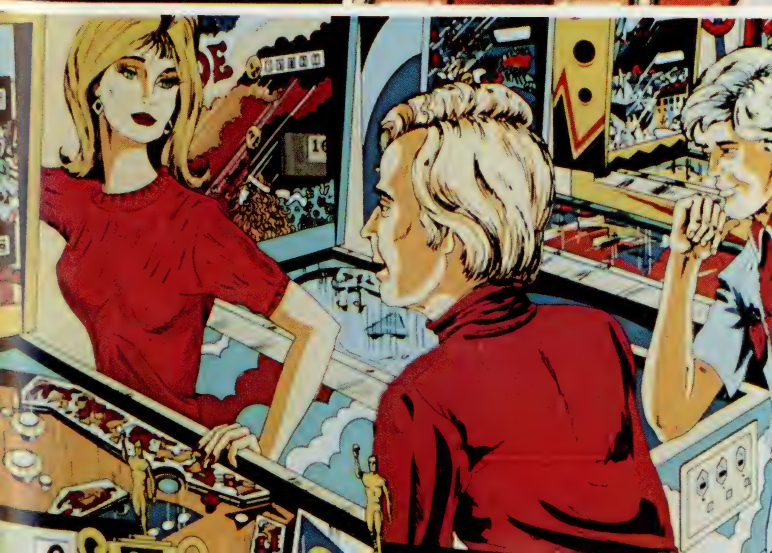
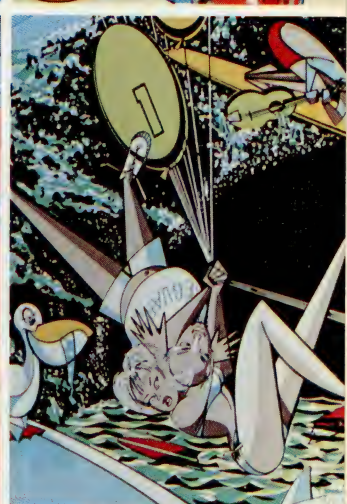
It has been said that quickly after this performance Bruce retired to a small, but cozy rubber room to undergo flipper therapy. (Not really, but it sounds good.) And if you're game, try to beat it. All we can say is good luck and pick a game you won't mind playing for four straight days.



THE 'FLIP' SIDE

Zipper flippers are a Bally invention that enable the ball to be "caught" before it drains down the out-hole. Featured on many Bally machines such as *Bazaar*, *Capersville*, *4 Million B.C.*, and *Fireball*, zipper flippers are activated when a particular target on the playfield is hit.





A CROWNING EVENT

As is the case with most skill-oriented endeavors, the question always arises concerning who the "best" player is. To help pacify this competitive streak within us all, and pinball players in particular, the Bally Manufacturing Corporation has taken a giant step in assessing this bit of information. William T. O'Donnell, president of Bally, stated, "we felt that this national tournament would give the devoted pinball player an opportunity to show his skill and be rewarded for his mastery of the game."

And so it was that Bally staged the first national pinball tournament and billed its extravaganza as "SUPER SHOOTER ... Battle of the pinball wizards." Begun last October, and taking place in Aladdin's Castle arcades across the country, the "SUPER SHOOTER" tournament was the first time players from all over could compete with their fellow pinball enthusiasts in other cities and states. And lest you think that the rewards of playing pin-

ball are always small, the prizes for the contest included the following within competition categories:

WEEKLY WINNERS—

- A collection of 5 MCA record albums featuring Trooper, "Knock 'Em Dead Kid"; Elton John, "Blue Moves"; Alexis, "Alexis"; Law, "Breakin' It"; and Roger Daltry, "One of the Boys."

- One Super Shooter Exer-Grip from AMF Voit, Inc.

- One softbound copy of *Pinball!* by Roger C. Sharpe, published by E.P. Dutton.

LOCAL FINALISTS—

- One GT-6600 in-dash 40 channel CB unit with AM/FM Stereo from Pioneer Electronics of America.

- A \$50 wardrobe award in sportswear from Faded Glory.

TWENTY REGIONAL REPRESENTATIVES—

- A trip to Chicago to compete in the Tournament Finals hosted by the Play-

boy Towers Hotel with accommodations at The Towers for 2 nights/3 days (MAP).

- A customized Super Shooter jeans outfit from Faded Glory.

NATIONAL FINALISTS—

- 10th-6th place: Sports package from AMF Voit, Inc.

- 5th & 4th place: Home Video System with cassette library from Bally Manufacturing Corporation.

- 3rd place: Datsun B-210 GX automobile and Bally Home Model Pinball Machine.

- 2nd place: Datsun 200SX automobile and Bally Home Model Pinball Machine.

- 1st place: Datsun 280Z automobile and the Bally Coin-op Pinball Machine on which the tournament was won.

As you can see, playing pinball, and playing it well, can have its rewards. So if you missed the tournament this time around, have no fear. There's always next year's *Second Annual SUPER SHOOTER* tournament to try your hand at.





What's the well-dressed pinball player going to be wearing this year? Well, if Faded Glory has their way it's going to be this applique and embroidery Super Shooter denim outfit.

THINGS THAT GO 'BUMP'

One of the most important developments in the history of the venerable pinball machine was the bumper. Invented in 1937 by a pinball designer named Nick Nelson, who worked for the Bally Manufacturing Corporation, the first machine to feature his ingenious device was called, appropriately, "Bumper."

It revolutionized the play and design of pinball. Initially labeled a "block-type" bumper it caused pinball strategy to change from what it had been—a game with nails and scoring holes—to something where the bumpers would score the points whenever the ball came in contact with them.

Although the block bumpers supplied only a gentle push to the ball, later improvements and refinements in electrical capabilities gave bumpers a muscle that added speed, excitement, and an element of unpredictability to the playfield, since the bumper springs sometimes slam the ball in a direction the player doesn't want it to go. These later modifications of Nelson's invention have been "pop bumpers," "mushroom bumpers," and the powerful "thumper bumpers."



DESIGNING MIND



Formerly at Williams Electronics, Norm Clark is now the chief engineer of the novelty division at Bally. In the business for over twenty years, he oversees the work of a young staff of designers who are turning out some of the most exciting and innovative pinball machines around. In an interview, he shared his thoughts about playfield design, and described the various steps involved in getting a game out to the public.

"We're always looking for something new," Clark began, "but you get into more or less of a rut because you know certain things are going to be successful. So you keep using them and using them until you run the risk of becoming stereotyped. When this happens you have to find something different to do. It's always easy to do what you did before. Many times games will wind up with the same playfield bottoms or the same tops and even though you know they're successful, you have to find a way to break it up. So, we'll try to come up with something different, or we'll remember back and say, well, maybe five years ago we came up with a bottom that was right, let's try it again."

"I don't see anything wrong with going back five years, if it was successful and if it can be successful now. Of course, you're only theorizing whether it's going to be or not. But we put the game together and play it, and we get salesmen to

play it, and if it's right and it looks good, we'll take a shot at it."

Many designers begin by drawing sketches of their next idea. Norm Clark expanded upon what happens next: "We'll then make up a whitewood, which is nothing more than a model playfield fitted with particular features noted on the sketch. In essence, a whitewood is a stage in the design of a game where we can test out our ideas in action to see if they work. By playing it, we can tell if the game is feasible or not. Whether it has play appeal. Also, it gives us the chance to make changes until the chemistry is right."

But what makes a *good* game?

"Ball action, good features, interest that's created in all levels of the game," Clark continued. "In other words, when you shoot a ball to the top of the playfield, it's not just a case of rolling through a rollover and hitting something. What does it do? What does it mean to the player? So, what we're saying is that you have to have a skill shot up there. Something that makes you realize that once you've pulled that plunger you're shooting *for* something rather than just randomly hitting the bumpers. As designers, we have to create interest in the center of the playing field and at the bottom. There have to be skill shots from the flipper, and at the same time you have to have ball action."

PLAYING THE GAME



In my time I've had the opportunity to play a great deal of pinball and also to observe many, many other people playing. The end result is that there is no sure-fire, nor tried-and-true method to playing the steel ball. What you do has to be comfortable for you and it may be a very individualistic style that you acquire. But here are some basic pointers.

The important thing to remember is that you have to be relaxed. Size up the game and get a feel of it once you've put your money in. Test out the flipper buttons on either side of the cabinet, position yourself, and begin. First off, you *can* nudge the machine. Many people think this is a form of cheating, but believe me, it isn't, and when you see designers playing their own games you can see why.

Now let me tell you how I play, and maybe you can pick up some clues for your own use. My own style is what I like to call a mixture of finesse, quick reflexes, and hard work. I stand in a crossed-leg

position (purely personal) some three feet in front of the machine (leaning in), balance my weight against the game, and place my index fingers on the flipper buttons. If you stand too close you'll find that the power has to come from your arms, which wastes much of your body strength. You might get more power by using your middle fingers on the flippers, but I prefer the control and comfort I get from using my index fingers. I rest the heels of my hands against the front corners of the cabinet and can thus nudge the game whenever it is necessary.

When is it necessary? Well, if you nudge the machine (and this action is nothing more than a well-timed jab and not a shove) with your right hand, you'll get a reaction on the playfield toward the left. Your left hand will elicit the opposite movement. But remember all you're trying to do is enhance and reinforce the ball action on the playfield. This has to be done without disrupting the flow and is

meant only to *influence* the flight of the ball off of some solid object (such as a bumper or kicker) without tilting the machine. And any of this is futile unless the ball is rebounding off of something. So that if the ball is just rolling down the center of the playfield, forget it. You're not going to be able to do anything and any effort is better left for the next ball in play. Just take your time and try to get a rhythm that is consistent with the game. If you're playing fast and the game is playing slow, or vice versa, forget it and move on to a game that is going to be satisfying to your style of play.

Lastly, practice. Play as much as you can and whenever the mood strikes if it's at all possible. The only way to be good, as is the case with any skill sport, is to play the game and work out all the bugs. Pinball is no different and just think of all the lights and sounds that are there to reinforce your every positive movement.

Quick . . . anybody have a quarter?

FOREIGN AFFAIRS



Surprisingly, although pinball is an American invention, the games are more popular in Europe than they are over here. And everywhere you turn there's yet another machine to do battle with whether it's "pin tables" in England, *les flippers* (pronounced "flee-pair") in France, *kampf flipper* in Germany, or *las máquinas del millón* in Spain. But anyway you say it, it's pinball that's the common denominator in all lands.



"You're getting more good players today who can stand in front of different machines and change their style of playing to beat it."
T.M. Los Angeles, Calif.

CRITIC'S CHOICE

The newest of the new, *Power Play* is Bally's first game for 1978, and is another in the line of extremely successful celebrity pinball machines. This time around it's Bobby Orr's turn to get in on the pinball action, and for the player, there's a great deal of action on this four-player machine. Here are tips for beating this game without getting "iced" too often.

The first thing to note is that there are four flippers to contend with: one at either side of mid-field and two at the bottom where most of us are used to finding them. There are also two banks of drop targets (four in each), along with three thumper bumpers for most of the action and scoring possibilities. A top kick-out hole is also on the scene, supplying the best chance for increasing your point total in multiple amounts.

The aim of the game is simple (on the surface). Just go for the drop targets; if you get down one side (four targets), you'll increase your out-hole bonus to a doubled value, do the same thing again and you're up to three times bonus, once more and it's five times bonus, and the next two times (if you can keep the ball in play long enough) will get you an extra ball and also a free play.

What you should try to do is get the



targets from the bottom flippers, using the right flipper for the targets on the left and the left flipper for the targets on the right. If you find your shots are a little off target, don't worry. The lanes can get you back up to the top and if you hit straight on in the middle of the machine, there's a white target which will activate a center post between the bottom flippers and thus save you the ball if it should roll back down.

Keep your use of the top two flippers to a minimum until you've mastered the lower flippers, otherwise you'll find yourself losing control of the speed and action of the game. So concentrate on the simple shots—the drop targets. And when you can, nudge the ball off the thumper bumpers into that top center kick-out hole. It's not that hard a game if you take your time with it and perfect the shots you'll feel most comfortable with.

And when you find yourself in need of a new pinball challenge, and want to play something just a little special, be on the look-out for Bally's *Playboy* game in the early spring. You can't miss it. It will be the one with Hefner and all his lovely Playmates on the back glass. And if that's not enough to get your quarter, wait until you see the playfield.

HOMING DEVICE

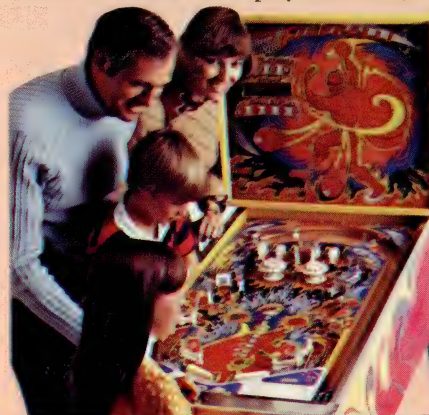
Do you have a *thing* for pinball? Could you, if you gave yourself the chance? Is there some spare space in your apartment or home that is just begging to be filled? Well, if you found yourself answering "yes" to these three questions—why not own your own? You can. And besides the old commercial models which are readily accessible through your local pinball machine distributor or retailer (check the Yellow Pages under "Amusements" or newspapers for advertisements), Bally has also entered the market as the first major pinball manufacturer to offer a game specifically designed for home use. *Fireball* is the name—a solid-state pinball machine that accommodates four players with the ease of a push of a button. The price isn't even that many quarters when you stop to think that it's a pinball game of your own—about \$650.

However, if your pinball tastes run toward the larger scale models you've come to know and love at the local arcade, here are some words of advice before you pay the piper.

First, go to that favorite arcade or playland and try out the games. Look to see which you like and why you like it. Are there any features you find more appeal-

ing and challenging; ones you don't get tired of no matter how many times you face them? Do you like drop targets more than stationary targets? Have spinners caught your fancy? Do two thumper bumpers offer enough action or would you like three?

Make notes as you go along of the games you find most satisfying. Mark down the name of the model as well as the manufacturer, then go price hunting. Try to get the exact game you want, but if it isn't in stock or the price is not within your means, look for something that has similar features and play action. Just



make sure you won't be bored with it, and play the game before you buy it. Make sure that everything is in good working condition, and that if it isn't, it will be by the time it gets to your front door.

A word about price: A general rule of thumb is that a new game will cost about \$1,500 to \$2,000. A game that is between two to five years old should run you about \$800. One that's between five to ten years of age will be about \$500. And any older than ten years, but still from the early 60s or late 50s, will be about \$350.

Games older than this will begin to fall into the hard-to-find category as well as the collectible range, and prices will depend upon the condition of the machine as well as the demand and availability. Other factors that will affect the price: a single-player machine will cost less than a two-player machine, which will cost less than a four-player model.

Graphic treatments on the back glass, such as animation, and even particular playing features on the field, will also help determine the high or low price of any given pinball machine. And that's the way the pinball bounces when it comes to owning your own.

CONTEST: IT'S ALL IN THE GAME

If you don't consider yourself *that* good a pinball player, or at least good enough to have a chance in a tournament, pinball can still be rewarding—at least it can here. How about over \$2500 in prizes and you don't even have to flip a flipper or thump a thumber bumper? All you have to do is see if you can answer the following questions regarding the world of the steel ball.

1. The back glass graphic in the center of page 32A comes from what machine?
2. Name the pinball machine that the graphics and playfield features pictured on page 32C come from. Key your answers to the diagram below.

- A. _____
 B. _____
 C. _____
 D. _____
 E. _____
 F. _____
 G. _____
 H. _____
 I. _____



3. Give the year and the name of the first pinball machine Bally ever manufactured.

PINBALL CONTEST
 c/o TRG Communications, Inc.
 1140 Avenue of the Americas
 New York, NY 10036

Name _____

Address _____

City _____

State _____ Zip _____

PINBALL CONTEST—Official Rules & Regulations

1. Fill in the entry blank above or enter by listing all answers, numbered appropriately, on a 3 x 5 piece of paper and mail to: PINBALL CONTEST, c/o TRG COMMUNICATIONS, INC., 1140 Avenue of the Americas, New York, NY 10036.
2. All seventy-two prizes will be awarded. Winners will be selected by a random drawing from all correct entries submitted. Said drawing shall be supervised by an independent accounting firm. If there are not 72 entries with all answers correct, a second drawing will be conducted from entries with lesser number of correct answers until all 72 prizes are awarded.
3. This contest is open to all residents of the United States except employees of GAMES Magazine, TRG COMMUNICATIONS, INC., BALLY MFG. CORP., their advertising and public relations agencies, and their respective families. Void wherever prohibited by law.
4. Offer subject to all applicable Federal, State and local laws, regulations and taxes.
5. No substitution will be made for any prizes offered.
6. This contest ends April 15th, 1978 and all entries must be postmarked no later than that date.
7. All questions must be completed in full if entry is to be considered eligible.
8. All winners will be notified by TRG COMMUNICATIONS, INC. Contest answers and winners will be announced in the September/October issue of GAMES Magazine.

PRIZES PRIZES PRIZES PRIZES PRIZES

Grand Prize winner will receive Bally's KICK OFF! four-player, full-size pinball machine.

1st Prize winner will receive a Bally Video Arcade with library of cassettes.

Five 2nd Prize winners will receive a \$50 Faded Glory denim outfit.

Twenty-five **3rd Prize** winners will receive the book PINBALL! by Roger C. Sharpe, published by E.P. Dutton.

Forty 4th Prize winners will receive a record album from MCA records.



FUTUREWORLD

Where is pinball going? Well, in 1976 the first sign of tomorrow surfaced and what it said was "solid-state." So say good-bye to the old drum-scoring machines and the old bells because the age of digital readouts and chimes is fast approaching. And nowhere can it be better seen than at Bally which has enjoyed the most success with their proven system, and is the first major manufacturer in the world to switch over to totally solid-state machines. The others will quickly follow.

What does solid-state mean? Try a game such as Bally's *Eight Ball* and you get an idea. It features a "memory" system which means that for each player, the playfield remains the way it was at the end of each ball for that player's next turn. If that sounds too confusing, try the game and you'll see what I mean.

And don't be surprised if you see other innovations taking form in the next few years, such as the use of holography or even three-dimensional playfields. It's all possible and so is much more. And where the games go depends upon us—the players. Because if we like what the manufacturers are doing we'll put our money in the machine, if we don't the games will change accordingly. And that's reassuring for even the novice flipper-ite. But then, that's what pinball is all about ... isn't it?

GAME OVER

Double Trouble

by Michael Ashley

Once you get into it, our Double Trouble acrostic is actually double fun. To solve it, guess as many of the words defined below as you can, write them in on the numbered dashes, and then transfer them to the correspondingly numbered squares in the puzzle. Black squares indicate spaces between words; if there is no black square at the end of a line, the word continues on the next line. Don't despair if you don't guess all of the defined words at first—as you fill the puzzle grid with letters, words will begin to take shape, so you can work back and forth between both sections of the puzzle. (The letters that appear at the top of each square in the grid refer to the defined words below.) The completed puzzle will read as a quotation from a published work, and the first letter of each filled-in word below, reading down, will spell out the author's first initial, last name, and the title of the work from which the quotation is taken.

1R	2B	3D	4A	5C		6L	7K		8Q	9U	10O		11P	12G
13B	14J	15R	16U		17M	18K	19S	20D	21B	22A	23V		24O	25M
26Q	27S	28P	29H	30R	31D		32N	33C	34G	35P	36F	37U		38T
39L		40J	41R	42O	43N	44G	45D	46Q	47V		48A	49U		50L
51D	52B	53K		54P	55T	56J	57G	58V	59O	60I	61K	62D	63J	
64N	65E	66P		67O	68G	69L	70I	71K	72H	73M		74B	75L	76O
77S	78U	79J	80P	81E	82F	83V		84T	85U	86O		87M	88H	89G
90G	91R	92I	93L	94P	95K	96B		97H	98L	99M	100V		101C	102N
103G	104J	105K	106P	107U	108Q		109A	110I	111O	112H		113M		114R
115U	116J	117V	118M	119H	120S		121T	122D	123L	124C	125Q		126R	127B
128T		129K	130P	131M	132C		133T	134F	135U	136L		137E	138A	139N
	140S	141O	142I	143D		144T	145R		146S	147U	148K	149D	150J	151Q
152E	153C	154R	155T		156G	157S	158P	159H	160R		161F	162E	163G	164M
165L		166O	167V	168C	169L	170N		171J	172U	173L	174C	175D	176I	177S

- A. Rent..... 4 22 48 109 138
- B. Cowhide..... 21 96 2 52 127 74 13
- C. Chess phrase..... 5 33 153 132 101 174 168 124
- D. What employees often claim to be..... 122 175 149 3 45 51 20 143 31 62
- E. Dark hours..... 65 81 137 162 152
- F. Trigonometrical term..... 161 134 82 36
- G. Improbable..... 89 12 34 90 163 68 103 156 57 44
- H. Drank..... 29 97 72 88 119 159 112
- I. Delicious beverage..... 70 176 142 60 110 92
- J. The worm catcher..... 14 116 150 104 63 40 79 171 56
- K. Literally "badger-dog"..... 148 105 95 53 129 18 61 7 71
- L. Unfathomable..... 6 39 169 75 123 136 98 173 69 50 165 93
- M. The teen years to Shakespeare..... 17 25 164 113 87 118 131 73 99
- N. Strategic World War II island..... 139 102 170 64 32 43
- O. Effect upon the mind..... 111 24 76 10 86 59 67 141 42 166
- P. Very close, as in a race..... 94 106 158 28 80 66 130 54 11 35
- Q. Pursues..... 26 8 46 125 108 151
- R. Gentleness..... 126 1 30 154 15 41 145 91 114 160
- S. Misleading, deceptive..... 19 27 77 146 140 157 177 120
- T. En route..... 38 55 84 121 128 133 144 155
- U. Holland..... 107 9 115 85 172 16 135 78 147 37 49
- V. Combined action..... 100 23 117 167 58 83 47

Cryptograms and Spygrams

by Norma Gleason

The following quotations and messages have been translated into code alphabets. The substitutions are constant throughout any one cipher, but change from one cipher to the next. We put the easy puzzles first so you'll be warmed up by the

time you approach the difficult ones. An asterisk (*) indicates a proper noun. The title provides a clue of sorts, and additional clues are given in the box below. For more tips on how to solve cryptograms, see pages 20-21.

1. HAM ACTORS

*WLEOIWTIEVI WEMH XLEX EPP
XLI ASVPH MW E WXEKI ERH AI
EVI EPP TPECIVW.
YRJSVXYREXIPC, QSWX SJ YW
RIIH QSVI VILIEVWEPW.

2. INEFFICIENT GROUP

N DKFFYVVHH DKWJYJVJ KZ
JHPHANC QHKQCH LGK DNWWKV
XK N RKT YW JHPHANC GKSAJ
NJ HZZYDYHWVCE NJ KWH
QHAJKW DKSCX XK YW KWH
GKSA.

3. GROUNDS FOR COMPLAINT

AXBUB FUB HP KHORIBC
WVBJJRHZJ. BIFOEV: QXBH F
MPOEFHN EKAJ RH F DPKU-CFN
QBBL, AXB BOEVPNBBJ VPJB AQP
MPDDBB WUBFLJ.

4. MONETARY DILEMMA

VEVIB GZCKZBVI RH ZMCRLFH GL
PMLD DSVIV SRH GZC NLMVB RH
TLRMT GL, ZMW VEVN NLIV
ZMCRLFH GL PMLD DSVIV RG RH
XLNRMT UILN.

5. LAW AND DISORDER

ZV *HYZXWR, LJNWPK RJY
ANPZTY VNRZTY FNWX TGX
AGXUYK ZPPYBGPPF, RJYF
LZDAF PYR RJY GZX NWR NQ
NVY NQ RJY RZXYL.

6. CLIFF-HANGER

SUKTAJXT HGXSIQCB JGMJEB
CUNQ APQSBQGOQB AUZQAPQC,
NCUIJIGE AU NCQOQTA APQ
BQTBXIGQ UTQB YCUS ZUXTZ
PUSQ.

7. NOT EXACTLY RIGHT

LFI DRHV LOW ZMXVHGLIH PMVD
DV DLFOW ZODZBH YV NZPRMT
NRHGZPVH, HL GSVB KFG GSV
OVGGVI C RM GSV ZOKSZYVG
ULI CCCCCRMT LFG.

8. KIBITZER NEEDED

This is an "undivided" cryptogram—word divisions have been concealed, and internal punctuation omitted. Letters follow each other in proper sequence, but the beginnings and endings of words are unknown to the solver.

LCOXT DSOXA ODNZR CYRZU
WXDDO EIWOX WXNUW SANKX
CDXXD REAKW ODRIE SOXUX
DWODR SSREX EFDYR HXDQX
OETFR AVFRW OYQKF WXCXZ
XCXX.

(continued on following page)

Extra Clues In Case You're Stuck

Cipher 1. XLEX is the most common four-letter pattern word. You won't have to guess if you read Pencil Pointer #7 on page 21.

Cipher 2. The word PEOPLE appears in the plaintext. Look for a cipher word with the same pattern of repeated letters.

Cipher 3. Punctuation might help you here. What word commonly precedes a colon? If you're still stuck, you'll find the cipher word BIFOEV translated on page 35, column 1, line 18, word 1 in this issue of GAMES.

Cipher 4. Two-letter words can help solve this one. So can connecting April 15 with the title.

Cipher 5. Try to find the plaintext v in this cipher.

Cipher 6. The digraph TH appears three times in the translation of this cipher.

Cipher 7. Don't be vexed by the unorthodox spelling in CCCCCRMT—foxy solvers examine clues carefully.

Cipher 8. The plaintext contains the word CHESS.

SPYGRAMS: COLUMNAR TRANSPOSITIONS

Here is something different in the way of cryptograms: It's a columnar transposition, meaning the columns are transposed. *No cipher letters have been substituted for plaintext letters. All the letters of the message are there in their original form, but they have been scrambled according to a plan.*

Columnar transpositions, in more complex form, have been used for military or spy ciphers by the French, Japanese, and Soviet governments.

In a columnar transposition, the solver must put the letters in their proper order. To do this, count the letters in the crypt. Decide what size rectangle this number of letters would make. For instance, 72 letters would fill a rectangle 8 letters across by 9 down (or vice versa), or 6 across by 12 down (or vice versa). It is not unusual for a solver to make false starts before hitting on the correct format—that's part of the fun. Write the cipher *vertically* in your chosen rectangle. Then rearrange the columns so that the letters make sense when read in normal horizontal fashion.

Example: AAIHN NEWES HSMHH TUIKY LESE

The proper rectangle for this 24-letter message is 6 down by 4 across:

1 2 3 4

A E M K

A W H Y

I E H L

H S T E

N H U S

N S I E

Do you see, at left, the disarranged word MAKE in the first row? Rearrange columns as at right, then simply read across.

3 1 4 2

M A K E

H A Y W

H I L E

T H E S

U N S H

I N E S

Get your feet wet with Number 9, and then sharpen your pencils for the finale.

9. CAROUSEL

VKHRO NOATO GUEEE LRDLM

SWDO

10. LOAFING LIFE AWAY

IOSIT EPOHR AIPER TPGGA IDGSE

AOEOV STIBH LEIYY INOYE SLNEY

TNIST RFDTE SHMLE OONND

LANGUAGE BARRIER

by Dick Crawford

The elderly Spanish gentleman was having a hard time in the department store. No one there spoke Spanish, so he was reduced to gestures. The saleslady soon gave up trying to understand him and just pointed to things at random, one after another. Eventually she picked the right item.

"¡Eso sí que es!" the old gentleman exclaimed. It's an old Spanish expression meaning roughly, "That's it! Just what I wanted."

The saleslady was disgusted and annoyed. She had thought he didn't know any English at all. "Why didn't you spell it out for me right away?" she grumbled.

What was the item?

Classifications

by D. Trevor Michaels

Classifications is a word puzzle for the entire family. Fill in each space in the appropriate category with a word (or words) beginning and ending with the specified letters. In the first row, for example, the foreign island must begin with M and end with R (answer: MADAGASCAR); the chemical element must begin with R and end with M (RADIUM); and so on. (Answer words may be any length and needn't agree with those given in the Answer Drawer. Forty correct is excellent.)

	FOREIGN ISLANDS	CHEMICAL ELEMENTS	FOREIGN CITIES	U.S. STATE CAPITALS	FOREIGN COUNTRIES	
1)	Madagascar	Radium	M	L	G	E
2)	P	S	R	M	R	A
3)	T	N	L	S	L	G
4)	S	A	C	A	S	D
5)	A	S	N	S	Y	A
6)	G	M	Y	A	A	N
7)	H	G	D	N	E	T
8)	B	O	N	S	M	A
9)	C	A	M	H	G	Y
10)	F	I	E	H	D	K

The Common Denominator

by Len Fellows

All of these famous folks have something in common. No, they don't have blue eyes. The answer is much more entertaining than that! To solve this "people-puzzle," first write the name of each person in the correct boxes. The clues will help. Next, in the word-find chart, find those names *plus* the **boldface** words in the clues. As you find them, loop them. Now, transfer the letters, by number, to their correct places in the Answer Boxes below. **IMPORTANT:** Only the letters *within the loops* are correctly numbered and will fit the answer. When completed, you'll find the Common Denominator for all these people.



HINTS:

Was married to a **Cuban** band leader.

His **Rochester** drove his Maxwell.

His newest love is Annie **Hall**.

Starred in "The Seven-Year **Itch**."

A great **Italian** actress.

He danced with **Ginger**.

The mother of the great star, **Liza** (with a Z).

His sidekick was a guy named **Jerry**.

Was married to Virginia **Woolf**.

He's known affectionately as **Duke**.



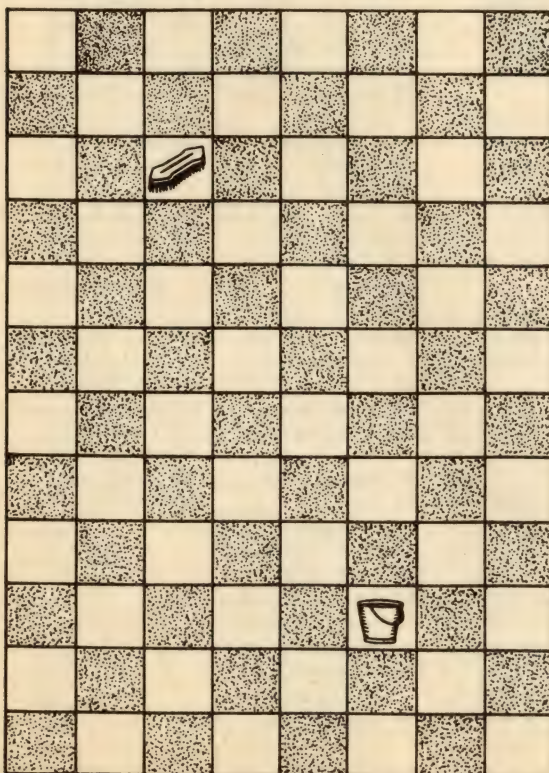
Answer
Boxes

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Starting at the top left-hand corner, toboggan to the chalet (bottom right) without using the same path twice. (This is an amazing toboggan, because it makes sharp turns.) Which way involves you in all the ups? What is the smallest number of ups you need have?



Charwoman Neligan Millicent Entwistle had to scrub the chancel tiles of the local cathedral. In order not to do the same tile twice, she left her bucket on the tile indicated and began work on the tile marked by the brush. She then worked her way from one to the other by means of a series of straight lines. She allowed herself to move any number of squares and in any direction like the queen does in chess, but to go over each tile only once. She found a way of doing the job in only 23 straight lines. Can you find it?



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THE WORLD'S MOST ORNERY CROSSWORD PUZZLE

The giant puzzle on this and the following pages has two independent sets of clues: “Hard” and “Easy.” If you use only the Hard Clues (beginning below and continuing beneath the diagram on the following right-hand page), you’ll find this puzzle among the most challenging you’ve ever done. But there’s also a set of Easy Clues (on the following left-hand page) to bail you out with additional information in case you get stuck. Keep the Easy Clues hidden by folding this page on the dashed line and tucking this side under. Then turn the page. To peek or not to peek is up to you.

by Jack Luzzatto

ACROSS		
1 Enthusiasm	59 Information: Br. slang	110 ——— perpetua (Idaho's motto)
6 Grape	60 Innovator	111 Type of fisherman
12 Aide: Abbr.	62 Mischievous	112 Subject of one of Jesus' miracles
16 ——— Minor	66 Uniformity	113 Snubber
20 Skittish horse	68 Home run hitter of yesteryear	115 Hair after swimming, e.g.
21 Cowboy	69 French-Algerian cavalrymen	119 Russian manifesto
23 Take back	71 Triangular plane wing	121 Austrian empress
25 Trompe l'oeil	72 High nest	122 Material for shredders
27 He deals from the bottom	73 Pertaining to 36 ACROSS	124 Texas leaguer
28 Science, for short	75 Himalayan native	125 Galatea's lover
29 Of the lowlands: Scot.	77 Juicer	126 Chorus
30 Morning, to Winchell	79 Checks	127 Fragrance
32 Continue	82 Tallinn	128 L.A.'s infamy
33 Spanish article	84 Legerdemain	131 Reconnaissance person: Abbr.
34 Pronoun	87 Cuts a film	132 Spells
35 Sneak around	89 Retread	134 Pundit
36 Aural science	91 Low-caste person	136 Constellation
38 Sheltered side	92 Person in a hurry to starve?	137 Exclamation
39 Goddess of discord	94 Heap on the flattery	138 Saucy
41 Gets to first base	95 French city	139 Drunkards
42 Imaginary circle	97 Greece, to Northern Greeks	141 Notorious
44 Otiose	99 Queen of Thebes, and namesakes	143 Bit of excitement
46 Job opportunity	101 Instrumental duets	144 Necromancies
48 Where some celebrants spend New Year's Eve	102 Brazen	147 84 ACROSS is this one's game
51 Sharp and biting	105 Trespass again	150 Athletic hose
52 Earns	107 English hounds	151 Full
53 Certain orbital points	109 Part of "The Whiffenpoof Song"	152 Fair
54 Fertilizer ingredient		153 Organization: Abbr.
56 Close!		154 Person in opposition
57 Icy ridge		155 Demeanor
58 Loaf		156 Solid: Comb. form

The Easy Clues for the World's Most Ornerly Crossword Puzzle.

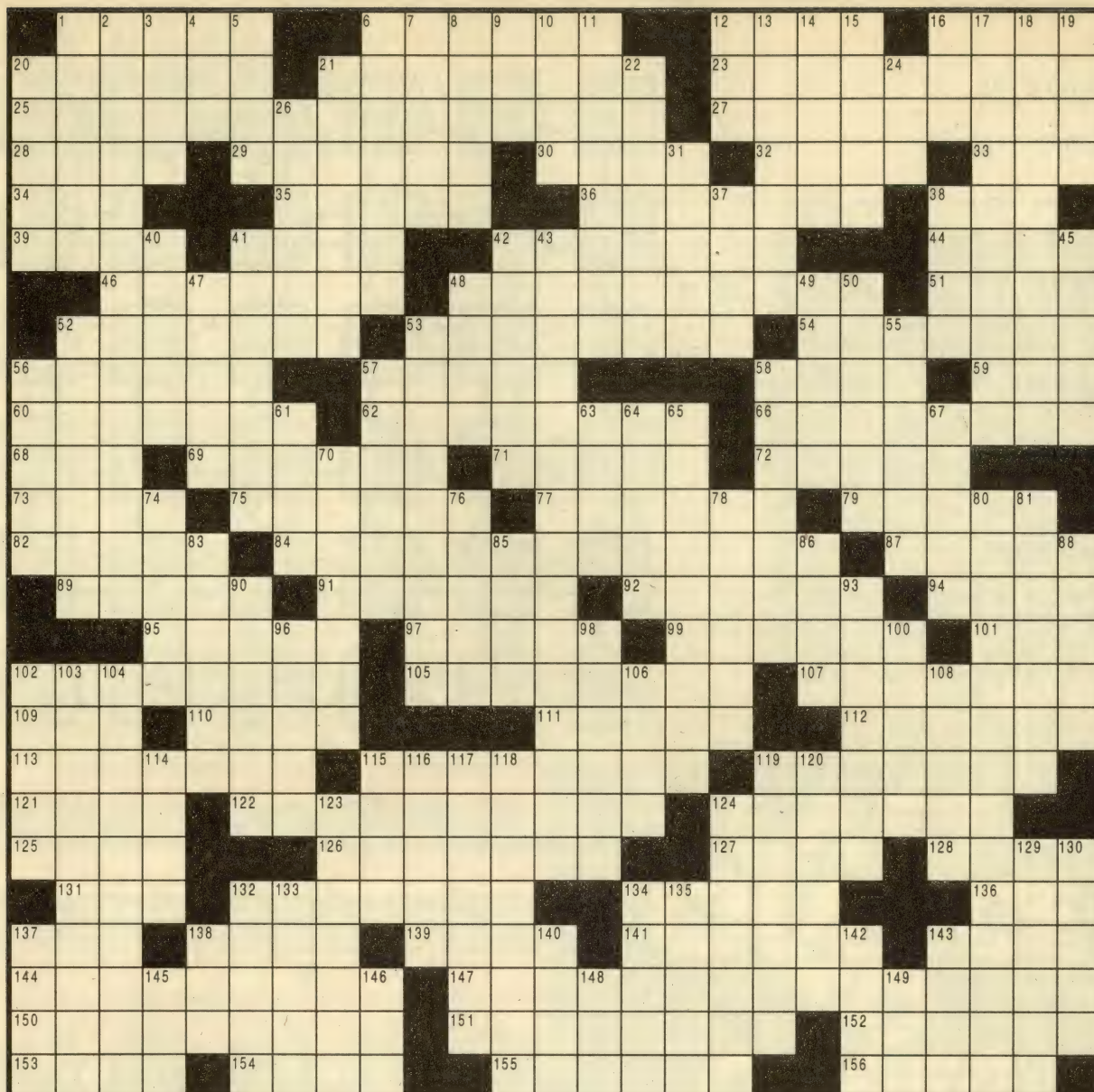
(Don't peek until you read page 37.)

ACROSS

- 1 Zest
- 6 Grape for muscatel
- 12 Assistant: Abbr.
- 16 Largest continent
- 20 Sudden runaway
- 21 Broncobuster
- 23 Regain ownership
- 25 Misleading image: 2 wds.
- 27 Cheating card player
- 28 Lab course
- 29 Of the lowlands: Scot.
- 30 How you'd pronounce A.M.
- 32 Wait one's time
- 33 — Vegas
- 34 She: Poss. form
- 35 Go furtively
- 36 Study of the ear
- 38 Confederate general
- 39 Goddess of discord (who ires!)
- 41 Becomes a base runner: 2 wds.
- 42 Global divider
- 44 Keep the motor running (but not racing)
- 46 Aperture
- 48 Prison cells for sobering up: 2 wds.
- 51 LSD
- 52 Dozens by the dozens
- 53 Closest orbital points, opposite of apogees
- 54 Salt of nitric acid
- 56 Not quite, but very close
- 57 Pinnacle of a glacier
- 58 Lie around
- 59 Military chief: Abbr.
- 60 Frontiersman
- 62 Inclined to play tricks
- 66 Smoothness
- 68 Baseball's Mel (an upset tot?)
- 69 Algerian cavalrymen in French armed forces (makes Pa hiss!)
- 71 River mouth
- 72 Eagle's nest
- 73 Suffix with narc and neur (meaning having a condition)
- 75 Guide for climbing Everest
- 77 Hole enlarger
- 79 Plant stalks
- 82 Estonian city (Laver goes backwards to it)
- 84 Magician's manipulation: 3 wds.
- 87 Revises copy
- 89 Quick summary
- 91 Outcast
- 92 Quicker
- 94 Winter weather
- 95 Tapestry
- 97 Belonging to Ms. Fitzgerald
- 99 Mythical woman who wept for her children and was turned into stone: Poss. form
- 101 Plural of duo: It.
- 102 Shameless
- 105 Infiltrate again
- 107 English hunting dogs like bloodhounds
- 109 Sheep's cry
- 110 This: Span.
- 111 Conger catcher
- 112 Whole breads
- 113 Overlooker of acquaintance
- 115 Not fashioned
- 119 Autumn month
- 121 Empress of Austria, 1916-18 (Wife of Charles I)
- 122 Classified information: 2 wds.
- 124 Foot-in-mouth faux pas

DOWN

- 1 Prairie hole digger
- 2 Secret reason for doing something: 2 wds.
- 3 Stimulant: Abbr.
- 4 Private eye: Slang
- 5 Spoken
- 6 Thinking things over
- 7 UCLA student (There's a clan after you!)
- 8 Smelly animal
- 9 Case: Fr.
- 10 Opera solo
- 11 Not old enough
- 12 Joan of —
- 13 Given life in the ocean
- 14 Young shoot
- 15 Hot drink for cold days
- 16 — Wednesday
- 17 Safe place for a lion: 2 wds.
- 18 People led out of Egypt
- 19 Poisonous snakes
- 20 German soldier: Fr. derogatory term
- 21 Alloys with little gold or silver content (no bills, please)
- 22 Single filming of movie scene
- 24 South-southeast: Abbr.
- 26 Movie collie
- 31 Prehistoric mound (like a totem?)
- 37 Voodoo deities (mixed up in Laos)
- 38 Deceiver
- 40 Scoop for soup
- 41 Foot parts, over the arches
- 42 Mundane chore
- 43 Necessary speed of magician's hands: 3 wds.
- 45 Paradises
- 47 Road curves
- 48 Syrian town (in a red comeback?)
- 49 Villain
- 50 Fitters
- 52 Gleam of gold, and other less valuable things
- 53 He's in a sweat
- 55 Cellulose thermoplastic (Tie ten to mold it)
- 56 Make — showing (do badly): 2 wds.
- 57 Clustered flowers of the rose family (gets praise)
- 58 Lessons help you — drive: 2 wds.
- 61 College cheers
- 63 Ileum: Comb. form
- 64 Military chief's aides
- 65 Not dexterous
- 67 Necessities
- 70 Assists in the act of: 2 wds.
- 74 Cocoa bean
- 76 Nimble
- 78 Simpler
- 80 Mental solution to a physical problem?: 3 wds.
- 81 Fatter
- 83 Food storeroom
- 85 Salt: Comb. form (found in hail)
- 86 Something owed
- 88 Hole cheese
- 90 Fixed to go off later
- 93 Real estate broker
- 96 Houston ballplayer
- 98 Sleek and suave
- 100 Small sailboat
- 102 Popular Spanish resort island near Majorca
- 103 Conjurer's performances
- 104 Legendary monsters with man's head, lion's body, dragon's tail
- 106 Types of beer
- 108 — in the woods (naive persons)
- 114 Kiln for hops, malt, or tobacco (and blended oats?)
- 115 Secondhand
- 116 Roman historian (confused the peons?)
- 117 Creaks or grates
- 118 Lover of Iseult
- 119 Spinster or bachelorette?: 2 wds.
- 120 Murmuring like a dove
- 123 Keep from harm
- 124 He rents the spare room
- 129 Baltimore ballplayer
- 130 TV panelist
- 132 Vice — (the other way around)
- 133 Hunter constellation
- 134 "Get thee behind me, —"
- 135 Compose a letter
- 137 Mountain in Thessaly, Greece (so as to confuse!)
- 138 Fondle
- 140 — thief to catch a thief: 2 wds.
- 142 Twitches
- 143 Identical
- 145 Tin of food
- 146 Hit the slopes
- 148 Moral wrong
- 149 Little kid



Hard Clues (cont.)

DOWN

- | | | | | | |
|---|----------------------------------|---------------------------------------|------------------------------------|-----------------------------------|--|
| 1 Native of Minnesota | 16 Residue | 45 Worlds of innocence | 67 Lacks | 102 Mediterranean island | 130 Ballplayer Maddox, not Elliott |
| 2 Covert purpose | 17 Houdini prop | 47 Sibillant letters | 70 Services (oneself) at the table | 103 Party entertainments for kids | 132 Vice — |
| 3 Caffeine, e.g.: Abbr. | 18 Descendants of Jacob | 48 Syrian town | 74 Chocolate source | 104 Legendary monsters | 133 Mythical hunter |
| 4 Gumshoe | 19 Vipers | 49 Jack | 76 Limber | 106 Brews | 134 Figure of evil |
| 5 Kind of exam | 20 German soldier, to the French | 50 Clockers | 78 More comfortable | 108 Real live dolls | 135 Author |
| 6 Considering | 21 Silver and gold alloys | 52 Sparkle | 80 Telekinesis, e.g. | 114 Kiln | 137 Greek mountain |
| 7 California collegian | 22 Scene shot perfectly | 53 Sweater | 81 Stronger | 115 Exploited | 138 Sometimes the best friend in the world |
| 8 Trounce the opponents | 24 Direction | 55 Cellulose thermoplastic | 83 Pantry | 116 Roman historian | 140 Bristle |
| 9 En-tout- — (all-weather tennis surface) | 26 Dog star | 56 Come in — second | 85 Salt: Comb. form | 117 Creaking sounds | 142 Nervous ailments |
| 10 Melody | 28 He'd fool you | 57 Certain flowers of the rose family | 86 Money problem | 118 A knight to rival Lancelot | 143 No different |
| 11 Underage | 31 Small grove | 58 Find out how | 88 Watch people? | 119 Card game | 145 Food pack |
| 12 Curve | 37 Voodoo deities | 61 Cheers | 90 Arranged beforehand | 120 Billing you don't mind | 146 Skim water or snow |
| 13 Like Aphrodite | 38 He'd fool you | 63 Small intestinal part: Comb. form | 93 Property dealer | 123 Shield | 148 What 134 DOWN wants you to do |
| 14 Youngster | 40 Silver birthright | 64 Wand | 96 Of a star: Comb. form | 124 Roomer | 149 Sum: Abbr. |
| 15 Hot cold cure? | 41 Parts of the feet | 65 Too clumsy to be a magician | 98 Lithe | 129 Bird | |
| | 42 Mission | | 100 One-masted sailboat | | |
| | 43 What hands are, sometimes | | | | |

Pay Off

by Philip Orbanes

A paper and pencil game for 2, 3, or 4 players

Object: To score the most points by throwing the dice and claiming spaces on the game board, while preventing the opponents from claiming spaces of scoring value to them.

Equipment: One game board (see illustration), three dice, pencil for each player.

Preliminaries: Each player throws the dice and high total plays first. Play then rotates to the left. Each player places his initials at the top of a scoring column.

Play:

1. In his turn a player throws the three dice. He chooses two of the dice and claims a space (by writing in his initials) corresponding to the two numbers. (For example: a player throws 2-3-5. He can claim any *one* of the following spaces: 2-3, 3-2, 2-5, 5-2, 3-5, or 5-3.)

2. A player can never claim a space that was previously claimed.

3. If a player throws the dice and none of the possible combinations are available, he throws a second time. If these combinations are also not available, he throws a third time. If still unable to claim a space, he instead marks an X on any one unclaimed space he wishes—making that space unavailable to any player, including himself.

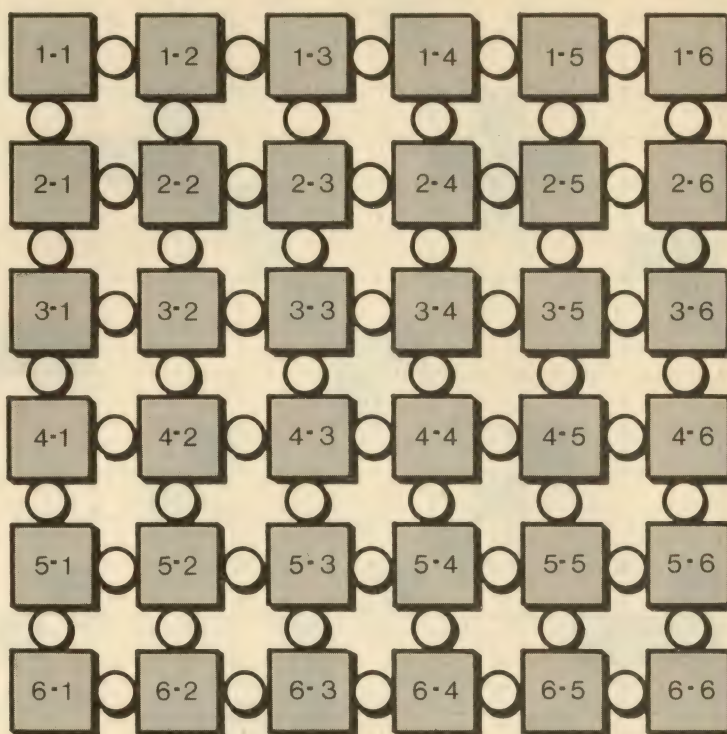
4. If a player throws triples (three of the same number) he claims any *one* available space he wishes.

Scoring: A player scores a "Payoff" whenever he claims a space horizontally or vertically adjacent to one or more spaces previously claimed by him. He blackens in each circle connecting the newly claimed space to a previously claimed space and scores in accordance with the number of circles blackened:

- 1 circle blackened 10 points
- 2 circles blackened 25 points
- 3 circles blackened 50 points
- 4 circles blackened 100 points

(For example: a player claims space 5-4, having previously claimed spaces 4-4 and 5-3. He blackens in the two connecting circles and scores 25 points.) Each player keeps a running total of his points in his scoring column.

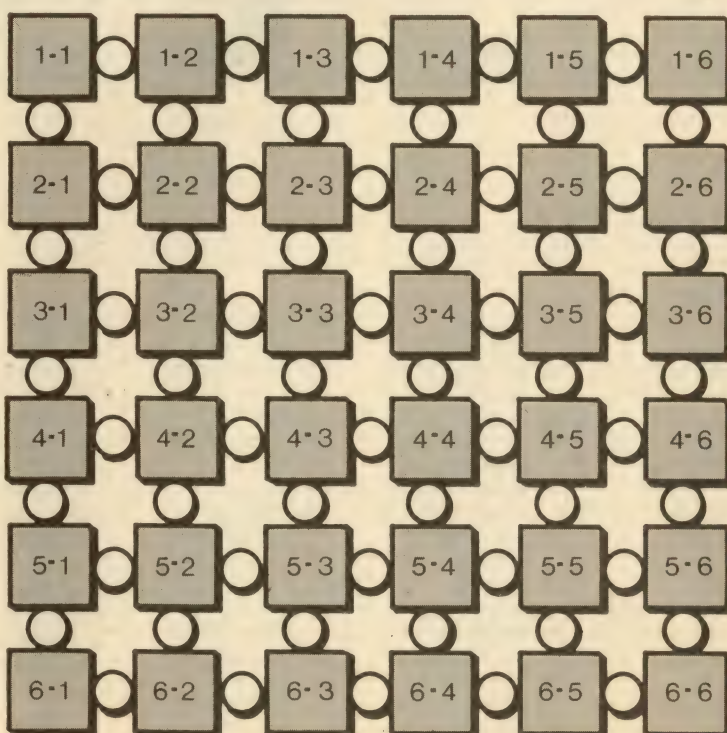
Winning: When all 36 spaces have been claimed or blocked with X's, the game ends. The player with the most points is the winner.



FIRST GAME

SECOND GAME

PLAYER'S INITIALS				



GAME CHEST

SMART ELECTRONIC GAMES

by David H. Ahl

This is the first in a series of articles on computer games. Part II will look at video games and Part III will survey microcomputers that weren't designed as games but on which you can play and even create your own games.

You may be wondering, from the title of this article, if there is such a thing as a dumb electronic game. The answer is yes, and they've been around for years. Their battery-operated spinners and whistles and bells and lights liven up the playing surface without contributing to the challenge of the game. But now we have games whose electronic components make it possible for you to find a willing and uncom-

race, but it does cause you to lose time. The easiest way to play is to leave the gear shift in first and concentrate on steering, an approach that challenges the hand and eye coordination of a young child. Up in fourth gear, the game would challenge the manual dexterity (and the composure) of even Artoo-Detoo.

Two other games from Mattel, **Football** (\$30 to \$40) and **Missile Attack** (\$20 to \$30), use the same basic chip as Auto Race but the playing environment and controls are different. Football is a ten-minute game in which the player maneuvers a running back through electronically-controlled defensive tackles. The display shows the down number, the yard line, and the yards to go. A kicking control allows you to punt or try for a field goal. Like the Auto Race, the game can be played slow or fast; and if you score, the speaker plays a victory charge.

Milton Bradley's Comp IV (\$20 to \$40) is the epitome of an intellectual game. It doesn't



Football



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40A

A built-in speaker signals a victory with a pulsing beep. (For defeat it offers a sad continuous tone.) A collision doesn't knock you out of the

that enables players to compete against each other as well as against the game's program. Up to four human players command destroy-

Code Name: Sector

Pay Off

by Philip Orbanes

A paper and pencil game for 2, 3, or 4 players

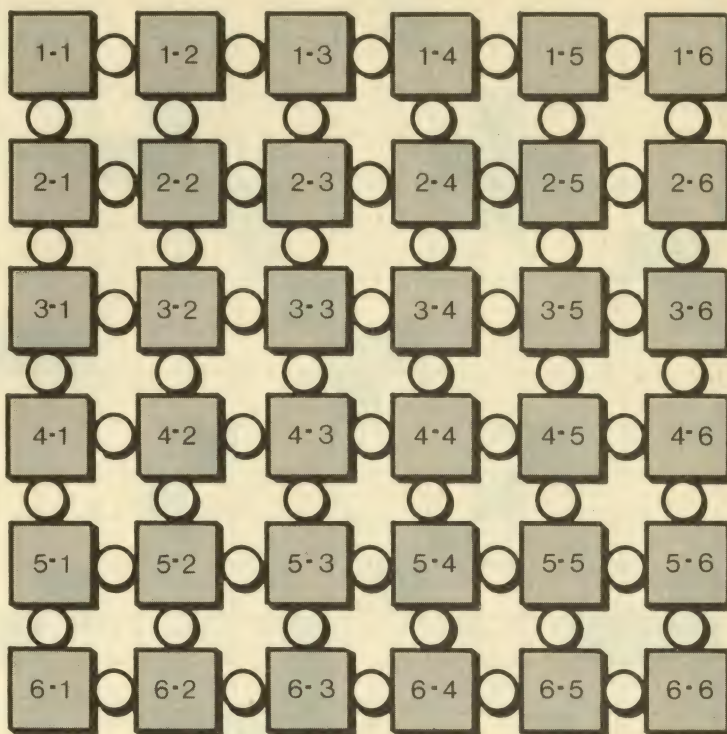
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Preliminaries: Each player throws the dice and high total plays first. Play then rotates to the left. Each player places his initials at the top of a scoring column.

Play:

1. In his turn a player throws the three dice. He chooses two of the dice and claims a space (by writing in his initials) corresponding to the two numbers. (For example: a player throws 2-3-5. He can claim any *one* of the following spaces: 2-3, 3-2, 2-5, 5-2, 3-5, or 5-3.)
2. A player can never claim a space that was previously claimed.
3. If a player throws the dice and none of the



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GAME CHEST

SMART ELECTRONIC GAMES

by David H. Ahl

This is the first in a series of articles on computer games. Part II will look at video games and Part III will survey microcomputers that weren't designed as games but on which you can play and even create your own games.

You may be wondering, from the title of this article, if there is such a thing as a dumb electronic game. The answer is yes, and they've been around for years. Their battery-operated spinners and whistles and bells and lights liven up the playing surface without contributing to the challenge of the game. But now we have games whose electronic components make it possible for you to find a willing and uncommonly skillful opponent whenever you want to play.

At the heart of these smart games are several hundred electronic parts packaged on a chip of silicon that measures $\frac{1}{20}$ th of a square inch in size. Technically, the chip is a microprocessor, not a computer: it performs some of the arithmetic and logical functions of a computer, but it has very little memory, and no generalized ability to generate or receive information. In short, it's a relatively simple integrated circuit programmed to play a specific game. The board or package for that game usually includes a few controls and a small read-out display.

Unlike mechanical games (and toys), which are forever breaking down, electronic games are as durable as small calculators (and more durable than transistor radios); the ingenuity of the program is usually more complex than the electronic circuitry. Inevitably, though, some units malfunction, and a ninety-day warranty is standard in the field; after that time there's usually a service charge for repairs.

The price range quoted for each game described below is what you can expect to pay for it in a mass merchandise store such as Sears, Penneys, or K-Mart. Specialty store prices will be higher than the ones quoted here. Clearly, it pays to shop around.

Mattel's Auto Race (\$20 to \$30) is typical of these games. Compact as a handheld calculator, it runs on a 9-volt transistor battery or an adaptor. The display shows three electronically-controlled autos (light blips) traveling down from the top of the screen. The player operates the steering and gear shift controls of a fourth car (a brighter blip) traveling up from the bottom of the screen. The problem is there are only three lanes, so the player has to steer in and out of oncoming traffic as he tries to complete four laps of the race in 99 seconds. A built-in speaker signals a victory with a pulsing beep. (For defeat it offers a sad continuous tone.) A collision doesn't knock you out of the

race, but it does cause you to lose time. The easiest way to play is to leave the gear shift in first and concentrate on steering, an approach that challenges the hand and eye coordination of a young child. Up in fourth gear, the game would challenge the manual dexterity (and the composure) of even Artoo-Detoo.

Two other games from Mattel, **Football** (\$30 to \$40) and **Missile Attack** (\$20 to \$30), use the same basic chip as Auto Race but the playing environment and controls are different. Football is a ten-minute game in which the player maneuvers a running back through electronically-controlled defensive tackles. The display shows the down number, the yard line, and the yards to go. A kicking control allows you to punt or try for a field goal. Like the Auto Race, the game can be played slow or fast; and if you score, the speaker plays a victory charge.

Milton Bradley's Comp IV (\$20 to \$40) is the epitome of an intellectual game. It doesn't really play the game against you, but it does allow you to exercise your reasoning faculties to whatever extent you are able and willing. The microprocessor chooses a random three-, four-, or five-digit number and the player tries to determine what that number is from clues given after each guess. (With a four-digit mystery number, this game is essentially an electronic version of Mastermind.) One clue tells the number of digits guessed correctly, and the second clue tells how many of them are in the correct position (but not which ones). For example, if the mystery number was 462 and your guess was 429, Comp IV's read-out would indicate that two numbers were correct and one was in the correct sequence. Flashing lights prod you on if you dally too long between guesses. I've seen seven- and eight-year-old children who know nothing about logic play Comp IV; they begin playing a game of chance with random guesses, and twenty minutes later they understand how to apply logic to a problem (though they still don't "know" anything about logic).

APF's Mathemagician (\$35 to \$40) has a much simpler secret number game (providing the player with clues of "too high" or "too low" after each guess), and plastic overlays that allow you to play five other simple games. The most challenging of them is "Lunar Landing," which puts the player in control of firing the retrorockets and controlling the speed of a space capsule as it tries for a smooth landing on the surface of the moon before it runs out of fuel. The unit is also programmed as a teaching calculator (it offers one- and two-digit arithmetic problems, and gives the correct answer if the student doesn't). And it can be used as a standard calculator with a ten-digit read-out.

Parker Brothers' Code Name: Sector (\$25 to \$45) is a smart "find the ship" game that enables players to compete against each other as well as against the game's program. Up to four human players command destroy-



Football



Comp IV

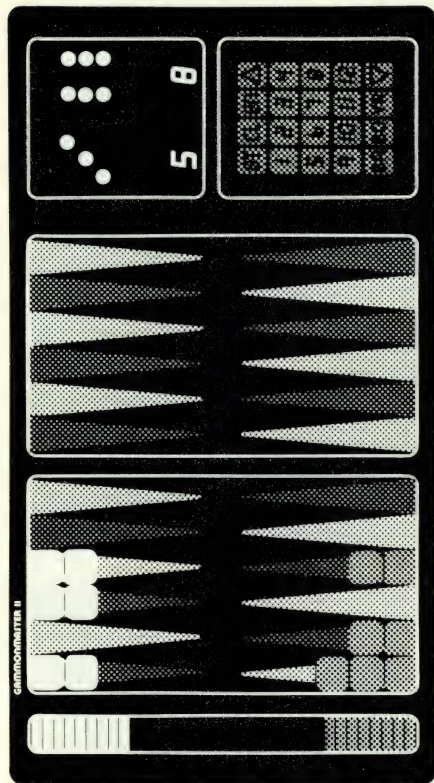


Mathemagician



Code Name: Sector

It's the pips!
It's the doubling cube!*
It's the score keeper!
It's the sound!



1978 Gammonmaster II Computerized Backgammon Game

Score keeping and sound response features have been added to all new models. Always ready to play an exciting game to match your level of skill using artificial intelligence programmed for all strategies. These advanced state of the art electronic products use micro-processors and memory technology that verifies every move, even recognizes illegal moves and generates a random roll of the dice. Play against GII yourself, with couples or conventionally. Handsome satin black plastic 12 $\frac{3}{4}$ " x 7 $\frac{3}{8}$ " x 1 $\frac{1}{8}$ " unit shipped with black carrying case, simple instructions, 32 men and 110V AC adapter. Ideal to challenge and improve your game. 90 day limited warranty, factory service and refund if returned within 2 weeks. Please allow up to 3-4 weeks for delivery.

1978 The Doubler* Gammonmaster II

This new deluxe model has all the new features, plus a doubling cube circuit that automatically requests, accepts or rejects a double based on the game situation. The Doubler GII model is shipped in a wood grain deluxe case.

24 HOUR 7 DAYS A WEEK INSTANT ORDER SERVICE GM-1
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Ship _____ 1978 GII @ \$199.50 + 3.50 hndlg chg each = \$ _____

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 Charge credit card ☐ VISA ☐ Master Charge ☐ AmExpress

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City _____ State _____ Zip _____

Smart Electronic Games

ers in pursuit of an electronically-controlled submarine. The microprocessor reveals information about the sub's location, depth, and direction of movement on the digital display, information that can be used by the players to track and torpedo the sub. But be careful—the sub can attack as well! The game includes eleven controls, 4,800 grid positions, and a facsimile Navy parallel rule used to chart movements. (There are no sound effects.) It is not an easy game to learn; more complex even than the rules is an understanding of how the sub and the destroyers can move. But once you do learn to play, it is enormously challenging and entertaining.

Other electronic games replace a human opponent in a standard board or card game. Now you have a choice of playing with your mate or with your machine.

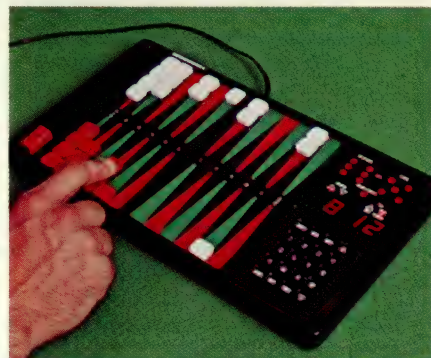
Unisonic's Vegas 21 deals honest blackjack with Las Vegas rules. To start with you might want to punch in a request for fifty thousand dollars worth of chips. After you make your bet, the display reveals your first two cards and the dealer's face-up cards. Other controls allow for drawing, splitting, doubling down, and making an insurance bet. You can ask for a review of your winnings and losses at any time, and the deck is automatically shuffled at the completion of the hand following the thirty-eighth card. Available in both desk-top (\$35 to \$65) and hand-held (\$30 to \$55) versions, the units double as standard calculators with eight-digit read-outs. One warning: the game is simple but the instructions are confusing.

Fidelity Electronics' Chess Challenger (around \$275) provides an actual chessboard, and a calculator-like keyboard on which the player enters his moves. Within seconds the microprocessor analyzes possible moves and responds with its best. The game is described in detail on page 43; I'll simply add that I was a rank novice when I first played the Chess Challenger, and after many long afternoons with it I find I'm getting better and better at the game.

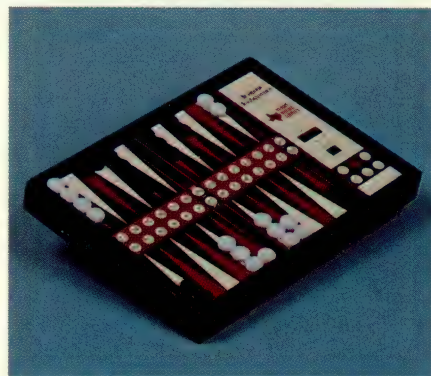
The electronic backgammon games provide standard playing boards and pieces but instead of dice they have roll buttons that activate random number generators. (The player must hit the roll button for the electronic opponent as well as for himself.) **Tryom's Gammonmaster II** (around \$200), which provides a calculator-type keyboard for entering moves into the electronic memory, is programmed to alter its style depending on the skill and weakness of its opponent. While it will beat a novice most of the time, it offers a fair challenge to both intermediate and advanced players. **Texas Micro Games' Computer Backgammon** (around \$200), plays the best game that it can, regardless of the human opponent's level of skill. It has a touch-sensitive panel in the center of the board on which the player enters his moves, and whatever moves the electronic opponent requests. It also has an "Update" button that allows you to program in a backgammon problem or game-in-progress and see what move the computer would make. These are the sort of refinements we frequently see in the second version of an electronic device. As to whether Gammonmaster II or Computer Backgammon is the better player, we'll let you know as soon as we can get them together for a match.



Vegas 21 (desk-top model)



Gammonmaster II



Computer Backgammon

In a sense, these smart electronic opponents are tools for people who like to play games, perhaps not all that different from the tool kit that's been available to the amateur carpenter or photographer for years. Only instead of extending the hand or the eye, electronic games extend the mind. The ones described here are just the beginning. A mere hint at the possibilities. The market is expanding and changing almost daily. Individual games will contain more than one game. Prices will go down. Inevitably, too, there will be games labeled "computer games" that really aren't very smart at all. But if the game itself can generate action that you as a player have to counteract or respond to, you're looking at a smart game. In any event, however interesting a game may sound from a description, it's a good idea to actually see it and play it in the store before making a purchase.

Active in the world of computers since 1956, Dave Ahl has worked with large computers, minis, and micros. He has written six books on computer applications in research, education, and recreation. He is publisher of Creative Computing, a magazine devoted to applications of microcomputers in the home, school, and small business. A free catalogue describing the magazine and related books is available from Creative Computing, 51 Dumont Place, Morristown, NJ 07960.

The Chess Challenger (by Fidelity Electronics of Chicago, \$275) actually plays a legitimate game of chess against a human opponent, defending its position carefully, "looking" at least one move ahead, and announcing "check" when achieved. It even has a light—seldom lit on my board—that announces, "I LOSE." By that, it means that the computer loses.

The new Challenger is a well-designed, improved version of an earlier model. The difference is considerable, and worthy of the 50 percent price increase. In the earlier model, the machine would accept any illegal moves made by the player. The newer game refuses to accept illegal moves—with certain exceptions which we'll come to. It allows you to be Black and have the game make the opening move. (The earlier version stuck you with the opening.) And it can be set to play in three different classes, unlike the old model, which played at only one strength. Class 3 provides an aggressive and skillful opponent, Class 2 is not quite as sharp, and Class 1 is very defensive and will seek a draw rather than a win.

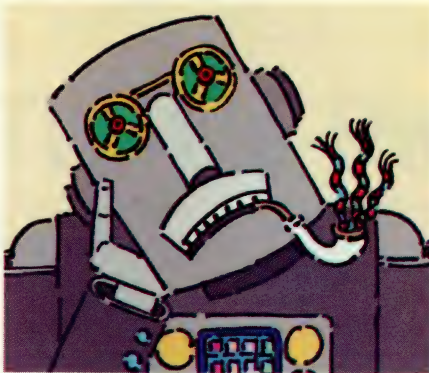
Challenger is well designed, and can be operated after ten minutes of reading the instructions. It consists of a small board and pieces for the human player; the computer stores the entire board in its electronic memory, and will recall, on demand, the position of every piece at any point in the game—useful when the cat walks through the scene of battle.

The readout is produced by large LEDs (Light Emitting Diodes, as in pocket calculators, only larger). The chess-board squares are designated A-1 to H-8 (numbered ranks, lettered files), and plays are entered by depressing switches. I'd have liked the letters and numbers to appear on the edge of the board, rather than just inside the outer squares, but they were easily relabeled with strips of tape along the edge.

In the first few games with the Challenger, you tend to be careless—until the computer earns your respect by wiping you out ruthlessly. At that point, you begin to refer to the game as "he" ("I wonder what he's planning . . .") or perhaps, "she."

After you punch up your move, the infuriating thing flickers its LEDs at you for as many as 58 seconds, then flashes its response. And take care to read its move carefully, or you will miss-move a piece, and be astonished a few moves later to see a pawn you had not positioned correctly, sweep your Queen out of the game. Of course, if you find that your board setup disagrees with the computer, the recall facility mentioned above will permit a review of previous moves at any point in the game—and the computer is always right.

The computer allows the player to castle, and will castle itself *at the first opportunity*, in accordance with generally



I WONDER WHAT HE'S PLANNING NOW

Matching wits with a chess computer

by Randi

accepted chess procedure. But in that very fact lies a weakness which the player can take advantage of. For, if you are chasing about in the corner of the board in pursuit of something—or are being chased—you can relax when you see the computer castle. It means that he is now quite safe from immediate danger, or that you have avoided some diabolical plan of his—for the moment.

But the machine will, as the instructions caution you, attempt to castle itself out of check, and that's illegal. The player can then correct this error by using the "Double-Move" (DM) key and restoring the offending King and Rook to their former positions. At this point, the computer will respond anew to the check on its King by making a different move—if possible. The only reason that it does this is that it has a built-in inhibition against castling more than once (and quite rightly so). But it also has an unfortunate inability to register that its first attempt at castling had been disallowed, and it will not again attempt a castling move even when it could legally do so.

Also, though the updated Challenger will disallow most illegal moves, it *will* allow the human player to castle across attacked or occupied squares, or to castle after the King or Rook has already been moved. It is up to the human player to ascertain whether he may legally castle; the game relaxes its vigil in this respect. The reason is simple: to castle, you must

use the DM key, and once this is in operation, *any* move, no matter how illegal or bizarre, may be made.

This versatile DM key has a very important additional use that isn't made quite clear in the instructions. To set up a specific problem, you can eliminate unneeded pieces from the board and place new ones anywhere. The procedure is simpler than imagined, though not obvious. It is also a bit tedious. Suppose you wish all your pawns removed from the board, plus both your Knights and Bishops. You can use *any* piece, of either color, to simply "take" all of these pieces in any pattern by replacing them with the capturing piece in the computer's memory. Since the game has a readout that simply says "FROM ___ TO ___" this is easy. Similarly, other enemy pieces may be removed, leaving only those desired. Now, by simply telling the computer the correct "FROM" and "TO" positions of what's left, you can set up any pattern desired.

If you wish to be so unsporting as to change the response that the game has made to any of your moves, it can be done provided the game has not taken a piece in that move. The DM key will permit this. It cannot be used, however, if a piece was taken, because that piece vanishes from the computer's memory.

The DM key is used to accomplish the *en passant* move, as well. But—and this the instructions do not tell you—the game itself will not employ *en passant* against you.

The greatest shortcoming of the Chess Challenger is one that can cause great annoyance, and moreover cannot be undone by "backing up." It will permit you to put your own King into check (by uncovering it to check or actually moving it into an attacked position) and its reply is a shocker: it just moves in and *takes* your King! After that the computer continues to take all your pieces in turn—as if it mattered after this gross breach of chess etiquette!

All in all, I can easily forgive these failings (though not the instructions' failure to inform you of them) since the Chess Challenger is a game to amuse yourself with. In particular, this machine is of unusual value to the beginner, for it not only supplies a patient and available opponent, but permits one to outwit the Machine Age with great satisfaction.

One last warning: don't disconnect the game in the middle and expect to return to it. It loses all its memory once it is disconnected. (Its 13-watt power consumption makes it difficult to put on battery power.) Having already learned of this kink, my son came downstairs one day with the game trailing the longest cord in the house and announced he was about to checkmate in two moves. And he did!

Smarter than you think

The Challenger has an unadvertised benefit: Late one night, suspecting that my son might be playing a post-bedtime match, I switched on my TV and found that Channel 2 was a mess of interference bars, a sure sign the computer was switched on nearby. I hollered upstairs at the miscreant, and, sure enough, Channel 2 suddenly cleared up.

Randi is an internationally known magician, specialist in the technology of illusion, and student of psychology—of people and machines.

Chess Pieces

Are Human Chess Players Obsolete?

by Lloyd Kawamura

Computers are making big news in U.S. chess. Last August, Northwestern University's Chess 4.6 program captured the second World Computer-Chess Championship ahead of the U.S.S.R.'s defending champion, Kaissa. Although Chess 4.6 is light-years away from being able to challenge Anatoly Karpov, the human world champion, it is a good deal better than computers were, say, ten years ago.

Chess-playing computers in the 1960s were not much better than beginners. More recently, advances in computer technology have made possible programs of much greater skill. In 1976, Chess 4.5 (Chess 4.6's predecessor) won the class B section of a tournament in Saratoga, California, performing just under master strength. And last February, Chess 4.5 placed first in the Minnesota Open Championship, performing at master strength and qualifying for the stronger Minnesota Closed Championship. In this event the computer could only score one win, one draw, and three losses, and finished in last place. Nevertheless many Minnesotans must have envied its ability even to qualify for the state championship, if nothing else.

Just how good are computers? Since they can calculate with lightning speed, can't they play chess better than human beings? The answer, at this time, is no. David Levy, a Scottish International Master, has a standing bet for the equivalent of \$2,125, that no computer program will beat him in a match by August 1978. According to most experts, his money is quite safe. Last April he defeated Chess 4.5 in an exhibition game played with painstaking care under match conditions.

But at "speed chess," Northwestern University's program is hard to beat. Chess 4.5 and its successor 4.6 have played games with several leading chess-players at the rate of five seconds a move while their human opponents had five minutes to make all their moves, the game being awarded to the human if neither side had won in sixty moves. Chess 4.5 beat Hans Berliner, a former world correspondence champion, in two exhibition games; held David Levy to a 2-2 tie in four high-speed exhibition games; and even beat grandmaster Michael Stean in an exhibition game. Computers clearly make a better showing against first-rate players in fast games, where exact calculation is much more important, than in slower games, where complex positional judgment is required.

As I see it, the fact that computers can calculate hundreds of thousands of positions is only impressive on paper. Both Kaissa and Chess 4.5 have made weak moves even while foreseeing hundreds of thousands of future positions and looking almost a dozen moves ahead; many chess masters playing the same positions would have made better moves while looking only a few moves ahead.

Chess masters realized the limited value of sheer calculation long ago; they evolved broad concepts of strategy, insights that would enable a chess player to judge the quality of a move without necessarily analyzing every possible consequence of it.

Thus, unlike a computer, a chess master can limit his consideration to the relatively small number of possibilities that "feel right." Only these moves are subjected to close calculation in order finally

to select the one actually played. Furthermore (and contrary to popular belief), few moves in a chess game are "forced," and the majority of moves are made from a range of choices. A chess master will frequently make a move that forces nothing in the immediate future, although he knows intuitively that the move is good. And sure enough, several moves later than either he or a computer could foresee, the move "forces" some concession or other.

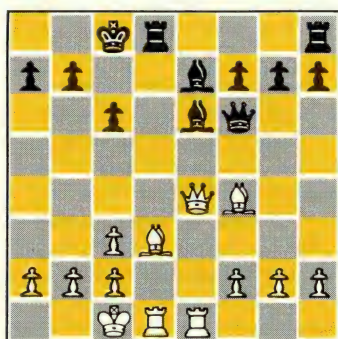
It is in these positions rich in possibilities for strategic planning that chess masters are far more able to "put together" complex goals and thus to make better moves. They are able to see more aspects of a move and thus to be more sensitive to creative possibilities.

In general, it may be said that computers reason from the particular to the general. They calculate hundreds of thousands of particular moves and evaluate them according to general principles. Humans, on the other hand, reason from the general to the particular. They get a general sense of the position—an intuition, insight, or "gestalt"—and then proceed to particular calculations. This is a more economical way to play chess. And I don't think there will be any really significant advance in computer chess until programmers are able to improve the computer's judgment, so that it can conceptualize in broad, *qualitative* terms, like humans. Even with a vast increase in calculating power, the quality of a computer's play would not begin to approach the quality of a grandmaster's Thought.

Lloyd Kawamura stands in the top 1% of the world's competing chess players. He plays, teaches, and writes about chess full time.

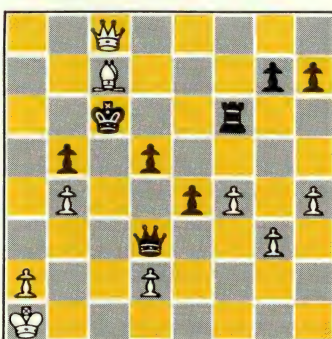
PROBLEMS

EASY Black



White
A. White mates in two.

MEDIUM Black



White
B. White mates in three.

HARD Black



White
C. White mates in three

Answer Drawer, page 60

Chimp-Off-The-Old-Block Contest



A	E	I	T	S	I	I
T	C	N	O	A	M	L
I	O	A	H	S	A	R
R	P	C	Y	P	I	G
E	S	E	I	T	L	O
I	R	P	N	D	A	R
T	D	E	C	A	I	V

First Prize: Computer Backgammon, by Texas Micro Games.
Four Honorable Mention Prizes: A GAMES T-shirt.

An eminent scientist once predicted that if a chimpanzee sat at a typewriter long enough, the ape would eventually produce a Shakespearean play word for word. In an ensuing experiment, a young mathematician from Brooklyn borrowed a chimp from the local zoo, sat him at a typewriter and waited . . . and waited. After several weeks, the chimp's sole output was a seven-by-seven block of what seemed randomly placed letters. It looked like the above. The mathematician has since discovered that within the block are hundreds of words that may be formed by the use of *adjoining* letters. A word may start with any letter in the grid, and the letters must join in the proper sequence to spell a word. They may join horizontally, vertically, diagonally, to the left or right, up or down. No letters may be used more than once in any word unless the repeated letters are utilized from different positions within the block. But letters used in one word may be used again in subsequent words. Thus in the following example the word "FORTUNATE" may be spelled out by following the arrows:

A	S	T	E	R
F	C	R	U	T
G	O	E	A	N

Arrows indicate the path for the word "FORTUNATE": F → O → R → U → T → A → N.

You may not find a complete Shakespearean play within the grid, but we suspect the chimp knew what he was doing. At first, we were content to find three- and four-letter words spelled out within the grid, but now we are finding five-letter, six-letter, and even longer words.

The object of the contest is to find the twenty *longest* words in the grid. Any (single or compound) word *defined* in *Webster's Third New International Dictionary* (Unabridged) is acceptable. There are absolutely no other restrictions.

Write your twenty words in the spaces provided on the entry blank. Score each word by *squaring* the number of letters in the word (a 3-letter word=9 points; 5-letter word=25 points; 7-letter word=49 points, etc.) and then total your score.

The highest grand total will win the contest, and in the event of a tie, which we feel is highly unlikely, the entry with the earliest postmark will be the winner.

©1978 Alan M. Newman

Contest deadline (postmark) April 1, 1978. Void where prohibited.

Mail this entry blank or a facsimile to:
 Chimp, GAMES Magazine
 515 Madison Avenue, New York, NY 10022

Word	Number of letters	Score (squared)
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____
7. _____	_____	_____
8. _____	_____	_____
9. _____	_____	_____
10. _____	_____	_____
11. _____	_____	_____
12. _____	_____	_____
13. _____	_____	_____
14. _____	_____	_____
15. _____	_____	_____
16. _____	_____	_____
17. _____	_____	_____
18. _____	_____	_____
19. _____	_____	_____
20. _____	_____	_____

Name _____ Total _____

Street Address _____

City _____ State _____ Zip _____

Backgammon

Playing mercilessly when
your opponent is on the bar

by Prince Joli Kansil

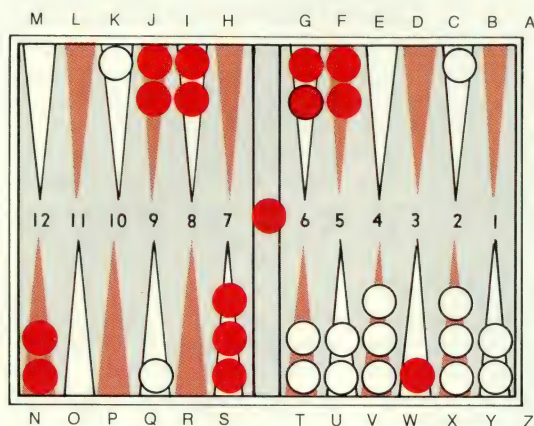


Diagram 1

How should White play rolls of a) 6-2; b) 5-1; and c) 4-3?

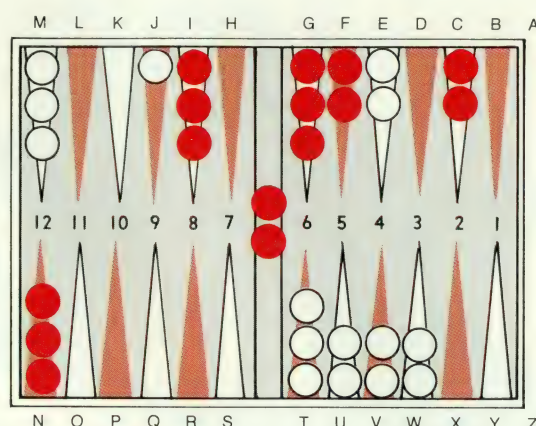


Diagram 2

How should White play rolls of a) 6-5; b) 5-5; and c) 4-3?

Before backgammon reached the craze proportions of the 1970s, it was widely played by royalty and the idle rich. Handcrafted boards were found in exclusive private clubs in Europe and America, and custom-made tables with checkers of ivory and onyx were doubtless part of the furnishings of splendid palaces and mansions. To be sure, the game had a certain genteelness and élat to it which totally evaded the masses for centuries. An outsider to the game would have been given the impression that backgammon was surely no diversion for the aggressive set of gamesmen who indulged in the popular card games and board games of the times.

But, alas! The onlooker who quickly became a casual devotee and then a die-hard backgammoner gradually learned that this is a cutthroat game. Urbane players who lack the killer instinct simply do not survive. Indeed, backgammon has a certain bloodthirsty quality which is comparable to the popular proprietary game Monopoly: once the knife is in, it is twisted, not removed. In Monopoly you build a house or two on Park Place and Boardwalk, and when your hapless opponent alights on these properties and pays you the exorbitant rent due, you promptly construct more houses—or hotels—and totally crush him. In backgammon, similarly, when your opponent is on the bar, you do all you can to send a second and even a third blot of his there so that before he has a chance to recover, you have not only won the game, but have scored a gammon besides. Some gentle parlor game is backgammon!

In Diagram 1, White should do some knife twisting and go all out for gammon.

He has little to lose as Red has a man on the bar and only two points made in his inner table. In this situation let us take three separate rolls and see how each one should be handled. For the first roll how should White play 6-2? He can safely run his back man out to the 10-point by playing C-K (the hyphen denotes that one man is moved the total of the two dice), but this is not the time to play conservatively. How about the play QWY? (The apostrophe signifies that a blot is hit.) With this more aggressive play White succeeds in hitting the blot on the 3-point and running to the safety of his 1-point. Still too conservative.

The winning play is for White to hit on the 3-point and *leave a blot there* (CE QW). If Red does not enter, White can make an inside prime by throwing any 1 or double 6, and gammon should then be an easy matter. What if Red throws a 3 and hits White back? No problem here. Red has virtually no inner table defense; White will be able to enter easily and continue his strong attack. In situations like this where you have so little to lose and so much to gain, the aggressive play is mandatory.

How would you handle a 5-1 roll in the same situation? Again, you should hit on the 3-point, and your blot on Q should stay where it is. It cannot be hit by Red as he must use both his dice for entering the two men he has on the bar! Your man on Q will come in very handy if Red fails to enter and you throw a 6: you will then cover your blot on the 3-point and have a closed board. For the 5-1 roll I recommend playing CH VW', hitting the blot and moving your back man to the 7-point. An alternative play that is almost

as good is KP VW', but moving down from K to P does not do much, and, as long as your opponent is busy on the bar, this might be the best opportunity to exit from his inner table.

Finally, take a roll of 4-3 in the same situation. How would you play it? These are not very good numbers and you cannot hit a second man, but the throw should still be managed aggressively. The best play is K-R. Unlike the previous 5-1 roll where you had an option to move to your 10-point, here you are able to move to your 8-point and a man so placed is in perfect position to bear *directly* on the 3-point. What you accomplish is to give yourself an extra builder with which to attack if Red should fail to enter. You will be able to make a prime now if you subsequently roll 6-5, 6-1, or 5-1, but even if you do not make the prime, the man on the 8-point can initially be used for just hitting on the 3-point with the prime being made later.

In Diagram 2 you the reader as White again have three separate rolls to play. This time the throws for White are 6-5, 5-5, and 4-3. How would you play each one? Remember, Red has two men on the bar and you should show him no mercy! If it will help you, picture yourself playing these set-ups not in a posh club on the Côte d'Azur, but rather at a dusty sidewalk bazaar in Cairo. There the playing pieces are crudely made of wood, not fashioned from ivory, and the style is to move aggressively by slamming the men down instead of sliding them gently.

Answer Drawer, page 60

Prince Joli Kansil, the top-ranking player in Hawaii, is the inventor of Bridgette and several other nationally marketed games.

Mappit

State of Confusion: Find the eight lost towns

Reproduced at right is the official, albeit abridged, roadmap of the State of Confusion. Situated, presumably, in the Middle West—where everything happens in neat, orderly rows—Confusion is six miles square, and thus each box on the grid is one mile on a side. There are ten towns in Confusion (lettered A through J):

- | | |
|----------------|------------------|
| A. Birdsnest | F. Meddybemps |
| B. Braggadocio | G. Niceville |
| C. Cornstalk | H. Weeping Water |
| D. Eek | I. Wink |
| E. Loveladies | J. Zap |

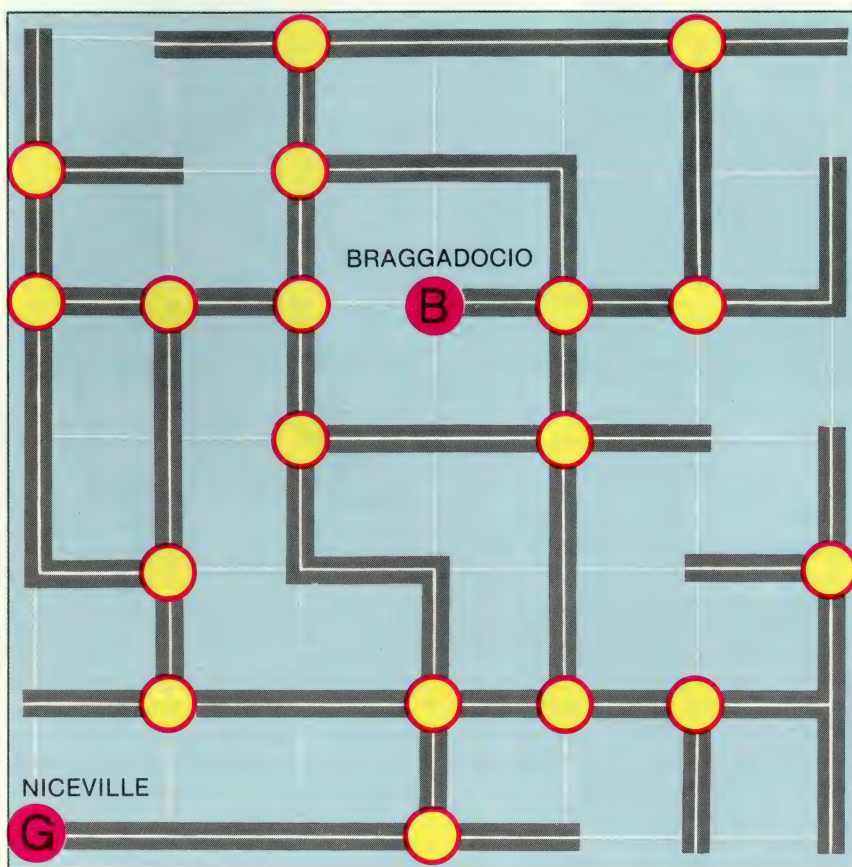
Braggadocio (the state capital) and Niceville (the cultural center) are world-famous and so are already shown on the map. But the locations of the other eight towns have been entirely forgotten by the bigwigs at the state highway department. Hoping to save face in an election year, they've ordered a new set of highway signs (lettered K through T and shown at lower right).

But this has only made matters worse, for no one knows where to erect the signs. It *is* known that each of the eight "lost" towns is located at one of the 18 highway junctions or intersections (circled on map), and that each of the road signs was designed to go at one of the remaining ten junctions or intersections (and indicates the number of miles from that spot to the designated towns). Thus, on the completed map every junction and intersection will be marked by either a "lost" town or a road sign. The highways are shown in black, and all mileages are calculated by the shortest possible highway route (*not* via the gray background grid *and* not "as the crow flies"). Help the bigwigs stay in power. Locate all the towns and signs on the map. It won't be easy. Logic will take you part of the way, but at some point you'll have to resort to trial and error. If you get Confused, there's a hint on page 61. (Peeking is allowed.)

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You may have suspected (!) that the State of Confusion is a fantasy, but did you know that all ten town names are borrowed from real places in the United States? Can you guess what states they're in?

Answer Drawer, page 62



CORNSTALK 5 BIRDSNEST 6	BRAGGADOCIO 1 WEEPING WATER 6
MEDDYBEMPS 2 LOVELADIES 4	LOVELADIES 2 WEEPING WATER 7
MEDDYBEMPS 3 EEK 7	WINK 3 ZAP 4
EEK 6 BRAGGADOCIO 6	BIRDSNEST 1 NICEVILLE 7
CORNSTALK 3 WINK 4	ZAP 3 NICEVILLE 6

Evil Cerebral

A Logic Puzzle

perpetrated by Al B. Perlman

Chances are, you've never heard of my alma mater, Fromage Academy. It's not a very big school, but there's one thing I can claim for it: in the abject deplorability of its educational standards, Fromage ranks second to none!

As this is clearly not an average diploma mill, you may find a tour of the campus rather interesting. You'll not only visit all sixteen academic departments, but you'll also get to meet the big cheese who presides over each of them.

The Fromage campus covers a four-square-block area bounded or intersected by six thoroughfares: ABSURDITY AVENUE, BALDERDASH BOULEVARD, DRIVEL DRIVE, HOGWASH HIGHWAY, LUDICROUS LANE, and MISHMASH MEWS. Each block is precisely quartered, and each department occupies its own building on a corner lot facing two of the six thoroughfares.

The courses of study are ABRACADABRA, BOMBASTICS, CACOPHONY, DEFENESTRATION, EPHEMERA, FLIMFLAM, GARBLING, HORRIFICS, IDIOPATHICS, JARGONIZATION, KITSCH, LETHARGY, MORONICS, NEBULOSITY, OBFUSCATION, and PSYCHOCERAMICS.

The not-to-be-sniffed-at panel of educators administering these disciplines is made up of Professors BLEU, BRIE, CAMEMBERT, CHEDDAR, EDAM, FARMER, GORGONZOLA, GOUDA, KREME, LIMBURGER, MOZZARELLA, NEUFCHATEL, PROVOLONE, RICOTTA, ROQUEFORT, and SWYSSE. Each department offers a one-year course, and students are required to take three subjects during each of their four years at the academy.

Here, drawn from loving memory, is a sketch of the Fromage campus along with a handful of clues to help you figure out (1) the six streets, (2) the location of each department, and (3) the professor who heads each department.

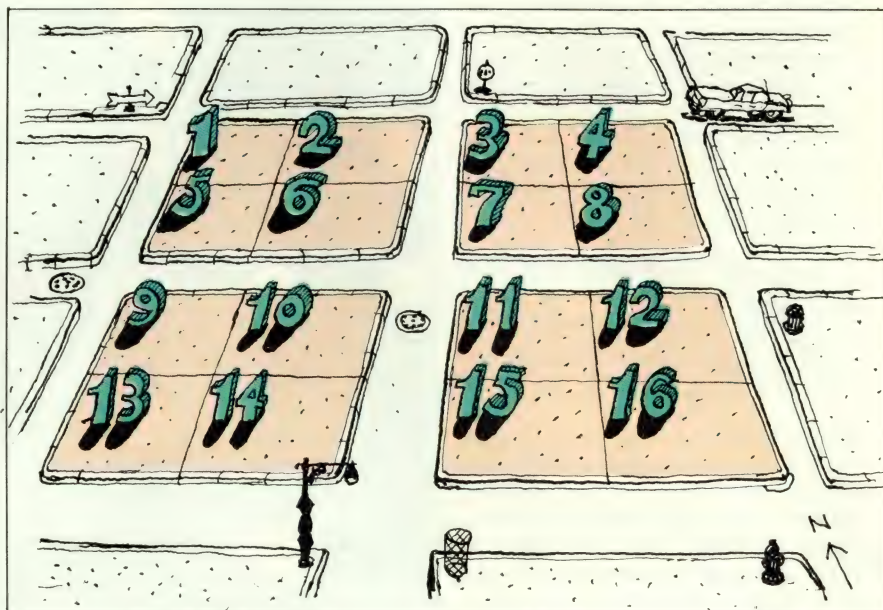
1. Balderdash Blvd. and Mishmash Mews are parallel; Ludicrous Lane and Hogwash Hwy. intersect; Absurdity Ave. runs north and south.

2. Prof. Limburger's course is required for all members of the freshman class. Freshmen must also choose either Prof. Kreme's class or Psychoceramics.

a. Those opting for Prof. Kreme's course must also sign up for either Prof. Bleu's course or Kitsch.

b. Those who choose Psychoceramics are also required to take either Prof. Gorgonzola's course or Abracadabra.

c. No matter which two of the six potential electives a freshman decides on, all three of his classes will be on the same



street, either Balderdash or Hogwash.

3. All sophomores are required to take Idiopathics. They must then make a selection between Prof. Provolone's course and Bombastics.

a. Those deciding on Prof. Provolone's course must also take either Prof. Mozzarella's subject or Jargonization.

b. Those choosing Bombastics must also enroll in either Prof. Neufchâtel's course or Lethargy.

c. All six potential sophomore electives are on Drivel Drive.

4. Juniors are all required to take Cacophony. They must also choose two electives that they didn't get around to taking in their first year:

a. Either Prof. Ricotta's course or Obfuscation; and b. either Ephemera or Prof. Brie's course.

5. The only subject not open to anyone during their first three years at Fromage is the one taught by Prof. Cheddar, and this is required for all seniors. Seniors must also catch up on two of the electives they missed during their sophomore year:

a. Either Prof. Camembert's course or Flimflam; and b. either Horrifics or Prof. Farmer's course.

6. Prof. Neufchâtel's department and the Psychoceramics Building and the Bombastics Building are all in the northwest corner of their respective blocks.

7. The Lethargy Building is on the same block as Prof. Limburger's class.

8. The Ephemera Building and Prof. Edam's department and the Idiopathics Building are all on Ludicrous Lane.

9. Prof. Gouda's course and Garbling are offered as electives only during the first year.

10. Prof. Swysse's department and the Nebulosity Building are both north of Balderdash and east of Drivel, on different lots.

11. If you missed both Prof. Kreme's course and Abracadabra during your freshman year, you'll be able to take one of them when you're a junior.

12. If you didn't take Prof. Edam's course or Moronics when they were first offered, you're out of luck.

13. The Lethargy Building and the Ephemera Building and Prof. Swysse's department are all on different blocks, but two of them face Mishmash Mews.

14. Prof. Gouda's and Prof. Ricotta's departments also are on Mishmash.

15. Prof. Bleu's department and the Obfuscation Building are on different lots in the same block.

16. The Garbling Building and the Cacophony Building are both on Absurdity Ave., though in different blocks.

17. Prof. Camembert's department and the Horrifics Building occupy two different lots south of Mishmash Mews.

18. Prof. Edam's department and the Jargonization Building are on different lots at the same intersection.

19. Prof. Mozzarella, whose department is in the same block as the Abracadabra Building, does not have any seniors in his class.

Answer Drawer, page 61

Al B. Perlman is a freelance public relations writer and mischievous puzzle creator. This puzzle first appeared in Intellectual Digest, September 1973.

THE AMAZING BRIDGE EXPLOITS OF CAPTAIN DIGGERY PIPER

by Terry Quinn

EPISODE II:
In Which It Is Explained
How the Diamond Eight Kept
Captain Diggery Piper in the New World.

WEST (Piper)		NORTH		EAST (Trumbull)	
♠ K 2	♠ Q 10 7 6	♠ J 3		♠ J 3	
♥ —	♥ K Q 9 3	♥ J 10 6 5 4 2		♥ J 10 6 5 4 2	
♦ A K Q J 10 9 2	♦ 5 4	♦ 8 7		♦ 8 7	
♣ K 9 8 5	♣ Q J 2	♣ 7 6 4		♣ 7 6 4	
	SOUTH				
	♠ A 9 8 5 4				
	♥ A 8 7				
	♦ 6 3				
	♣ A 10 3				

E/W vulnerable. Diamond two led.

East	South	West	North
Pass	1S	4D	4S
Pass	Pass	Pass	



Rhonda Klapper

It was midnight, a full half hour after our last bridge hand, when I found the Captain lurking in a dark, toasty corner of the Hawk and Dove bar at Pennsylvania and Third. Just as had happened the week before—on that fateful night when Piper first materialized at the Congressional Duplicate Bridge Club—we had taken first place honors. Three female attendants were now seeing to his every need—one delivering a pony of Pernod, one setting before him a dozen succulent Chincoteague selects, a third draping his cape over an empty chair and slipping what appeared to be a hatcheck into the breast pocket of his tunic. He looked pleased indeed with the thoroughness of their ministrations, but something—I could not tell what—was missing.

"You were right," I greeted him. "We won again! And by two whole boards!"

"I should have guessed two and one half," he replied with a wry British arching of the eyebrows. "But why don't you sit yourself down, old chap, and let me spring for a pint or two."

"Fine," I said, eager to begin dispelling the clouds of mystery that surrounded my new partner, "if you'll agree to tell me how you ended up in America."

"The diamond eight."

"The diamond eight?"

"Precisely. But allow me to elaborate. I came to this country a year ago last July to participate in your Bicentennial celebration as the guest of a fellow Britisher—one Sir Geoffrey Trumbull, Captain of the tall ship *Cressida*. But alas, when that glorious vessel came about for the last time and embarked upon its voyage back to fair England, she was minus one Piper." Here Diggery sipped his Pernod, savoring its licorice bouquet as well as the rhetorical effect of his pause.

"You will want the particulars. On the eve of what you Yanks insist on calling your Day of Independence, we were moored in the halcyon waters off Sandy

Hook, where Trumbull and I were being fleeced by two of the *Cressida's* sleazier mates in a cutthroat session of bridge.

"Now, Sir Geoffrey," Diggery continued, as he scribbled the above deal on his napkin and flipped it before me, "has a reputation in Her Majesty's Admiralty as an avid bridge. What is less widely appreciated, however, is the fact that his intellect, cunning, and powers of concentration are far better suited to the game popularly known as 'Go Fish.' Well, when as West, I produce the underlead of the twentieth century, declarer covers my deuce with dummy's four and drops his trey under the baffled Sir Geoffrey's seven. I heave a mental sigh of relief and sit back to await the obligatory heart shift.

"You understand that I am basking at this point in the sweet realization that the usual procedure of woodenly leading out one's Ace and King of diamonds sets West up for a double endplay.

"'Queer goes on,' says Sir Geoffrey with a chuckle, 'but I suppose if he can't top the seven of diamonds, he'll have an even rougher go of it with the eight, wot!' And he plunks that bloody card on the table. I win the trick perforce, but I do not panic. If that cretinous captain holds the trump Jack, I calmly reason, we're still home safe, for once I continue with yet another diamond, any play in dummy but the spade Queen will net us an uppercut when my partner's knave forces declarer's Ace. I can then take my trump King and exit safely with the spade deuce. And even if South rises with the Queen on my diamond lead and plays Ace-low of trumps with the thought of coercing me to solve his club problem for him, I will save the day once again by slyly dumping my King under his Ace, and promoting Trumbull's hoped-for Jack."

"Brilliant!" I gushed. "Just brilliant!"

"Yes," Piper agreed, "and flawless, save for the fact that it assumes as much as a thimbleful of common sense at the opposite side of the table. Well, I lay down my

diamond Ace and declarer pitches a club from dummy. 'Think!' I want to shout. But Sir Geoffrey gaily tosses off a heart and boasts, 'Not likely to find this old sea dog trumping his partner's Aces.'

"South ruffs, cashes his spade Ace and gives me the lead in this position:

WEST		NORTH		EAST	
♠ —	♠ Q 10	♠ —		♠ —	
♥ —	♥ K Q 9 3	♥ —		♥ J 10 6 5 4	
♦ K Q J 10	♦ —	♦ Q J		♦ —	
♣ K 9 8 5	♣ —	♣ —		♣ —	
	SOUTH				
	♠ 9 8				
	♥ A 8 7				
	♦ —				
	♣ A 10 3				

thereby presenting me with the selfsame choice I have been striving to avoid from the outset—to give him a ruff and sluff with a diamond or a free finesse with a club. There was no escaping this time. Trumbull had end-played me for good."

"So what did you do?" I asked.

"Vacated the premises, of course."

"You certainly do stand on principle."

"Principle, balderdash! We were playing for sixpence a point. One more fiasco like that and I would have owed those bos'ns my boots. No, I demanded then and there to be shuttled by dory to the dark New Jersey shore, and proceeded to put as much terrain as possible between myself and the good ship *Cressida*."

When Diggery finally rose from his post-game collation, we walked to the door of the pub, where he presented his hatcheck to the attendant.

"I didn't know a hat was a part of that outfit of yours," I said.

"It isn't," he replied, as he dropped a dollar into the dish, relieved the hatcheck girl of his parrot, and exited into the early morning air.

NEXT EPISODE: *Love at First Sighting.*

Terry Quinn is a novelist, ghostwriter, and journalist living in Washington, D.C. © 1978 Terry Quinn

The 1978 baseball season is fast approaching. Can the Yankees win it all again? Will the Reds make a comeback against the Dodgers? Can the Philadelphia Phillies or the Kansas City Royals finally win a pennant? Which players will cover themselves with glory? Who will emerge as the goats of 1978? I can't wait to find out. Having grown up in mostly sunny climes, I never really sat by a hot stove and told baseball stories. But this is how I have imagined the scene, as the weather grows warmer and baseball fever rises.

I can see it now. A cold winter night in New England, sitting around the old wood stove, replaying the baseball season just past, anticipating the start of spring training. Dad, Gramps, our old dog Buddy, and I, enjoying the warmth of the stove, as well as the hot air of baseball conversation. Gramps lighting up his pipe, starting a story about Ty Cobb, Sam Crawford, and the great old Tigers. Dad, rejoining with a few hot ones about the '34 Series when the Gas House Gang whomped the Tigers of Hank Greenberg. Dad and Gramps took turns quizzing me to make sure that I got my history right.

Who pulled the bird out of his cap at Ebbets Field in 1918 to acknowledge a less than admiring crowd? (Casey Stengel)

Who broke up Bill Bevens' no hitter in the '47 Series in the ninth? (Cookie Lavagetto)

What team did the Miracle Mets beat in the 1969 National League playoffs? (The Atlanta Braves)

Who struck out Tony Lazzeri to stifle a Yankee rally, then went on to save the game (and Series) for the Cards in 1926? (Grover Cleveland Alexander)

Soon I could name all the World Series winners (and losers) from 1903 on. So could most of my friends. In addition, we knew the starting lineups of all the (then) 16 major league teams.

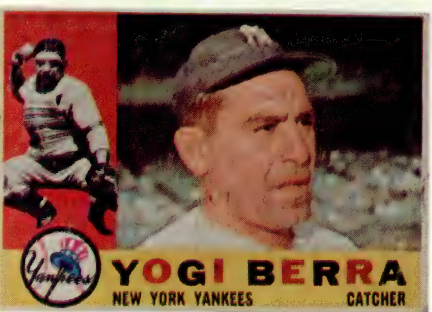
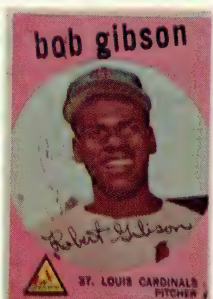
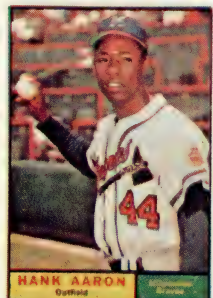
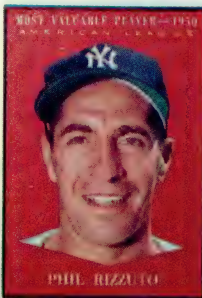
Some people might regard the above as trivia. To a baseball fan, that is heresy. A great deal of the charm of the game is in its minutiae; the whole may be less than the sum of its parts. Here are some more Hot Stove League questions to warm your off-season conversation in preparation for spring training.

The Questions

1. Who has had the most times at bat in major league history? (Hint: he is the first player listed alphabetically in the roster of major leaguers.)
2. Who holds the major league record for hitting safely in the most consecutive games? How many games? In what year did he do it?
3. Who holds the record for the most singles in one season?
4. Has any modern big league team gone an entire season without being shut out? If yes, which team and when?

THE HOT STOVE LEAGUE

An Important Baseball Trivia Quiz
by Chip Block



Baseball cards courtesy of The Sports Corner.

5. Which team won the most games in one season?
6. Which team won the most consecutive games in one season?
7. Who holds the record for the most home runs in a World Series?
8. What pitcher appeared in the most games, lifetime?
9. Who dropped the third strike in the 1941 Series, giving the Yanks another chance to win the game (which they did)?
10. Who robbed Joe DiMaggio of a homer in the 1947 Series with an incredible catch?
11. Which White Sox pitcher performed heroically while some of his teammates were "throwing" the 1919 Series? (Hint: he was later responsible for enabling the great Stan Musial to continue his career and go on to stardom.)
12. What is Pee Wee Reese's real name?
13. Only three big leaguers have had lifetime batting averages over .350. Who are they?
14. There have been many "brother acts" in baseball history. Which *three* brothers played for the same team on the same day?
15. One player has won the Most Valuable Player award in both the National and American Leagues. Who is he?
16. Has any active major leaguer pitched a perfect nine-inning game?
17. Who holds the record for the most strikeouts in a World Series?
18. Who pitched the most lifetime shutouts in the big leagues?
19. Who pitched and won the seventh game of the 1956 Series for the Brooklyn Dodgers? Whose fabulous catch in left field preserved the victory?
20. Who is/was known as:

- | | |
|-------------------------|--------------------------|
| a. The Wild Horse | m. The Rajah |
| of the Osage | n. The Scooter |
| b. Larrupin' Lou | o. The Quiet Man |
| c. The Ol' Perfesser | p. The Count |
| d. The Say Hey Kid | q. Big Poison |
| e. The Georgia Peach | r. Little Poison |
| f. The Flying Dutchman | s. Country |
| g. Old Iron Hands | t. Stash |
| h. Hammerin' Hank | u. The Splendid Splinter |
| i. Big Six | v. Home Run |
| j. The Fordham Flash | w. Joltin' Joe |
| k. The Big Train | x. Satchel |
| l. The Duke of Flatbush | y. King Carl |

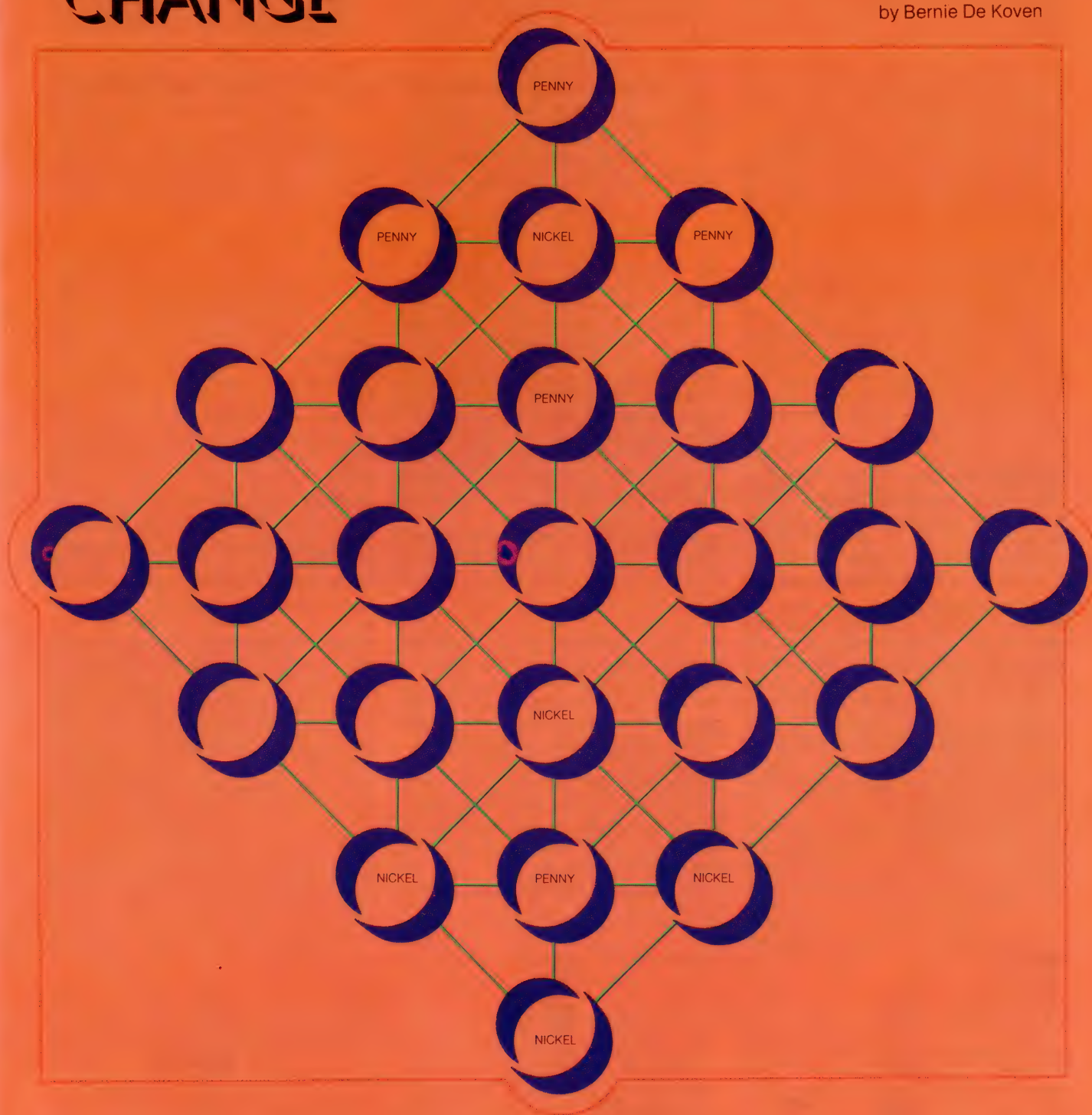
Answer Drawer, page 60

Chip Block has hit 800 career homers, pitched 40 perfect games, struck out Babe Ruth, Willie Mays, Ty Cobb, and Stan Musial many times with the bases loaded and big bucks on the line, stolen home 54 times, while maintaining a lifetime batting average of over .400—all in the daydream league. His other pastime is publishing GAMES. He has recently purchased a wood-burning stove.

LOOSE CHANGE

An original game for two players,
with variations and puzzles.

by Bernie De Koven



The basic game is played with 5 pennies and 5 nickels, set up as shown on the board. Those on the top half of the board are heads-up, those on the bottom half, tails-up. Hence the two players are named HEADS and TAILS.

Moves A player can move any one of his or her own coins along a straight line in a vertical, horizontal, or diagonal direction, as many spaces forward or backward as the

player desires, so long as no other coins are in the path of the move. One move to a turn. Players alternate turns.

The Winner The first player whose move results in having the sum of all the coins in a straight line equaling exactly three cents, even if the coins are more than one space apart on that line. But at least one of those three cents must belong to the opposing player.

Turn page for strategy, variations, and puzzles.

Loose Change Strategy In order to describe moves I've given each space on the Loose Change board a two-digit number (Diagram 1). The first digit indicates the horizontal row, and the second digit, the position of each space in its row. Space 23, for example, is the third space in the second row. (The numbers serve a descriptive purpose only, and otherwise have no significance in the game itself.) Thus, HEADS begins with a penny on spaces 11, 21, 23, and 33, and a nickel on space 22. TAILS begins with a nickel on spaces 53, 61, 63, and 71, and a penny on space 62. I like to think of these clusters as flowers, with an unmatched coin surrounded by four identical coins.

The Revealed Victory At first you think of a winning move as one that adds a coin to a line to make the total of that line equal three cents. But sometimes you win because you've subtracted a coin from a line. In the game-in-progress in Diagram 2, TAILS could move the nickel on space 33 to any other legal space and win the game by disclosing a three-penny line.

The Foiled Victory The player with four pennies may appear to have an advantage over the player with four nickels. Not so. First of all, the player with the nickels also has control over the one and only penny that the other player needs to win. Second, a nickel on any line prevents a win on that line, and thus nickels become a very useful defensive tool. It is TAILS' move in the game in Diagram 3. HEADS has three potential winning moves (the pennies on spaces 11, 23, and 33 to positions in the fourth row). If TAILS moves one of his nickels from 53, 61, or 63 to the fourth row, the line will add up to more than three cents and HEADS' potential win will be foiled.

The Foiled Victory Puzzle Pennies, also, can help foil a victory. With that much of a hint, I submit to you the problem in Diagram 4: TAILS had the first move

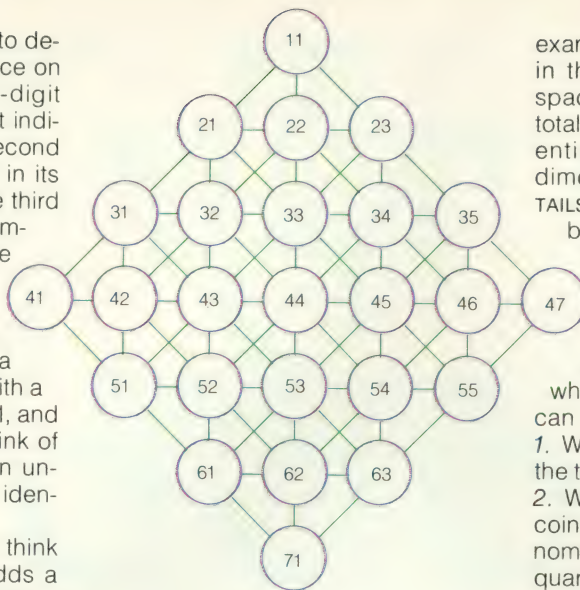


Diagram 1

in this game, and moved the penny from 62 to 42. This looks like an exceptionally powerful move. TAILS is now set up to score a win by moving that same penny from 42 to any of the following spaces: 31, 41, 43, 45, 47, or 51. How can HEADS effectively counter all those threats in just one move?

Gambling Some say the game of Loose Change, since it deals with money, should be played for money. In order to resist such foolhardy notions, I purchased a vase especially for this game into which I place all my coins. The vase is narrownecked, so I can't move the coins without a jangling reminder of my promise not to gamble. The effectiveness of this solution is but further proof of that venerable truism: a penny saved is a penny earned.

Variations An intriguing aspect of Loose Change is that it can be played for more than a three-cent win: eight cents, twelve cents, fifteen cents, and yes, even sixteen cents.

Or, you can try adding more coins. For

example: using nickels and pennies as in the original game, add dimes on spaces 41 and 47. It changes the game totally and makes it possible to develop entirely new strategies. (One of the dimes should be HEADS and the other TAILS. Yes, I know it's not as symmetrical, but it makes the game work.)

You can also try playing Loose Change with just about any moderate amount of loose change. A couple of quarters and some pennies and a few dimes—whatever. So far, I've discovered that I can come up with an interesting game if:

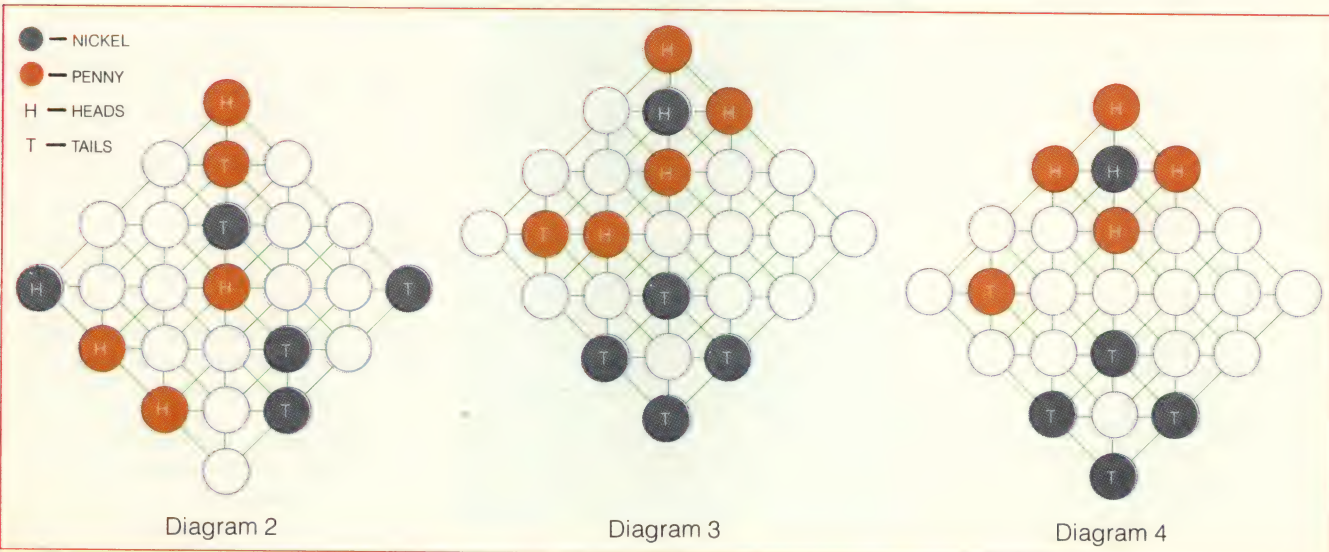
1. We have at least four coins between the two of us.
2. We each have the same number of coins. It doesn't seem to matter what denominations the coins are. I might have a quarter and four pennies and you might have a dime and four nickels. As long as we both have the same number of coins, the game will work providing that:
3. The winning total can't be achieved in one move, usually doesn't require the use of four or more coins of the same denomination, and hardly ever requires the use of more than four different denominations.

Puzzles You can play many different kinds of puzzles with Loose Change. I leave you with the following: The total amount of my loose change was 95 cents, I had four different kinds of coins, and the sums of HEADS' coins was two cents more than half the sum of TAILS'. Placing HEADS' coins on spaces 11, 21, 22, 23, and 33; and TAILS' on 53, 61, 62, 63, and 71, I discovered that the following sums were either already on the board or were one-move wins: 7, 11, 18, 26, 27, 31, 33, 35, 36, and 51 cents. What coins did I use for HEADS? For TAILS? And what were the positions of all the coins?

Answer Drawer, page 60.

©1978 by Bernie De Koven

Bernie De Koven is a director of the New Games Foundation. His book, *The Well-Played Game*, will be published by Anchor Press in April.



BOOK SHRIMP

Mathematical Magic Show by Martin Gardner (Alfred A. Knopf, 1977, 284 pages, hardcover, \$8.95).

Devotees of Martin Gardner will greet his latest excursion into the world of mathematical puzzles and diversions with delight. Newcomers will enjoy his ability to combine elegant mathematical recreations with serious insight into the nature of mathematical thought, a hallmark of Gardner's writing style. This book, eighth in Gardner's series, is no exception. He interjects flashes of humor and odd twists in the most unexpected places, covers a wide range of disciplines, and always leaves the reader with puzzles worth pondering. (Answers are given at the end of each chapter.)

The *Mathematical Magic Show* collection again draws from Gardner's "Mathematical Games" columns appearing in *Scientific American*. Among the book's delights are the postscripts drawn from reader response to the original articles. And, for the first time, Gardner has included a crib sheet for neophytes—a miniature glossary of mathematical terms.

The opening chapter, entitled "Nothing," demonstrates Gardner's scope. Brilliantly, he analyzes "Nothing" from the perspective of the mathematician, philosopher, scientist, artist, musician, detective, and humorist.

For the hardcore mathematician, there are essays on factorial oddities and perfect numbers; but Gardner balances these with playful chapters on polyhexes (a kind of geometric jigsaw puzzling), polyominoe games (using many-sided dominoes), colored triangles and cubes, and dice problems. A chapter featuring the knight move in chess presents fascinating challenges.

There are light chapters devoted to logic puzzles, double acrostics, playing card problems, finger arithmetic, and new "twists" to the Möbius band paradox (that confoundingly single-sided strip of paper). Included are the delightful Cocktail Cherry Puzzle (which appeared disguised as a Gibson onion in the previous issue of *GAMES*) and a chapter on Ridiculous Questions that does not require knowledge of advanced mathematics.

The chapter on Game Theory provides a clear and concise explanation of this "fantastic amalgam of algebra, geometry, set theory, and topology, with applications to competitive situations in business, warfare, and politics as well as economics."

Those who have not experienced the fun of Gardner's mental migrations will find this book an excellent beginning. And once introduced, they surely will want to go on a treasure hunt for his seven previous books.

—David Miller

Scrambled Exits: The Greatest Maze Book Ever by Gyles Brandreth and David Farris (Holt, Rinehart & Winston, 1976, 125 pages, paperback, \$2.95).

Leering from the cover of this clever book is the famous mug of Groucho Marx. Popeyed, he peers down from the top of a tortuous maze at the figure of that other noted Marx-man, Karl. With amusing incongruity, Karl struts sashily into the maze, brandishing Groucho's sig-

nature cigar, complete with waggling pinkie.

There are forty funny mazes in this book, each of which is accompanied by an equally entertaining quiz. With the Marx maze, for example, we find the following query:

What do you need to make sense of these letters?

NMLCRCKRS	DCKSP
MNKYBSNSS	NGHTTHPR
HRSFTHRS	DYTHRC

The many mazes included vary widely in difficulty and subject. You can, for instance, pick your way through an elaborate newspaper-page maze or slide smoothly through the signature of Elizabeth I. The puzzles also range from the silly to the complex. The maze solutions, thoughtfully printed in red in an otherwise black-and-white book, make it easy to discover where you may have gone astray. In sum, an attractive little volume which should provide a few hours of fast, fun pencil-play for all comers.

—L.K.P.

(Answer Drawer, page 61)

Beyond Competition by Sid Sackson (Pantheon Books, 1977, 76 pages including 96 game sheets, large format, paperback, \$2.95).

I suppose it could be construed as an act of cronyism when one contributing editor reviews the work of another contributing editor to the same magazine. On the other hand, how could I possibly fulfill my obligation as Bearer of Good Tidings and Significant Achievements without reviewing Sid Sackson's newest book, *Beyond Competition*?

This book is the latest in a series of paper-and-pencil game books comprising such titles as *Beyond Tic Tac Toe* and *Beyond Solitaire*. In each book of the series, Sid describes several innovative games that he has created. The balance of each book provides readers with copies of game boards. Each book brings something new to the games world—the use of colored pencils, new forms, new strategies—and each is capable of providing a troop of dedicated competitors with many evenings' worth of good, hard playing.

In *Beyond Competition*, Sid transcends everything else he has done to date. Each game is good and playworthy. But what really sets these games apart is the degree of cooperation required—a game is won only if everybody wins. Otherwise, everybody loses.

I've had occasion to review many attempts at games of cooperation. Most attempts, though providing players with an opportunity to collaborate on something, generally result in mutual boredom. I had been on the brink of believing that there could be no such thing as a challenging cooperative game. But Sid has happily proved me wrong.

The first game in the book is called "Space Explorer," modeled on the theme of the Lunar Landing games that have become so popular with computer people. The object is for the players to navigate a spaceship from planet to planet and back to earth without running out of fuel. This game is at least 50 percent chance, because the direction in which the spaceship goes and the distance it can travel is largely

determined by the draw of cards. But, since players have the option of a hand of cards to choose from, there is enough choice to provide a sense of strategy. We are all operating the same spaceship, but take turns navigating. The game can be played with two, three, or four players, and, yes, it does take some time to figure out the rules, but, once you've played the game through, you'll want to play it again.

Another offering, the game of Peace Conference, is somewhat like the card game War. But in this game the object is to play a card that will complement the other players' cards in such a way as to produce a specific series.

The game of Resources offers yet another approach to cooperation. This game is almost pure strategy—the object being to arrive at an equal distribution of resources through movements along a grid into different resource areas. Again, the challenge is indeed real and exciting.

Who knows, perhaps such games will be instrumental in providing us with a whole new way of sharing play. At the very least they provide an attractive alternative to competition.

—B.D.K.

Additional New Titles

The Kid's Pocket Calculator Game Book

By Edwin Schlossberg and John Brockman (William Morrow & Co., Inc., 1977, 187 pages, 20 drawings, hardcover, \$6.95, paperback, \$3.95). Calculator puzzles for kids are explained here in simple language and designed for educational fun.

More Games for the Superintelligent by James F. Fixx (Popular Library, 1977, 143 pages, paperback, \$1.75). The paperback edition of Fixx's popular puzzle book, filled with brainteasers of all kinds contributed by members of MENSA, the high-I.Q. society.

The Pleasures of Deception by Norman Moss (Reader's Digest Press, 1977, 208 pages, hardcover, \$7.95). An amazing and often amusing chronicle of several dozen infamous hoaxes and practical jokes.

Playtime! Americans at Leisure by Mark Jury (A Harvest/HBJ Book, 1977, 192 pages, black and white photographs, oversized paperback, \$5.95). A picture book of America at play: pastimes observed range from hang gliding and amateur theatrics to crab races.

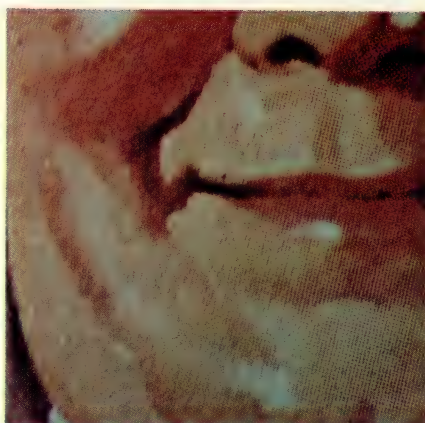
Having It Your Way: The Strategy of Settling Everyday Conflicts by Robert Bell (W.W. Norton & Co., Inc., 1977, 189 pages, hardcover, \$8.95). Robert Bell, well-known games theoretician, outlines strategies for resolving a number of common conflicts in the way that best accommodates everyone's priorities: a practical application of gaming technique.

Chess for People Who Can't Even Play Checkers by Robert Danielsson, illustrated by Mats Andersson (Mason/Charter, 1977, 80 pages, paperback, \$1.95). A charming little chess primer which introduces each chess piece by personality. (The king, for example, "moves slowly and carefully—that's how he got to be king.") With whimsical companion illustrations.

Eyeball Benders

What are these objects?

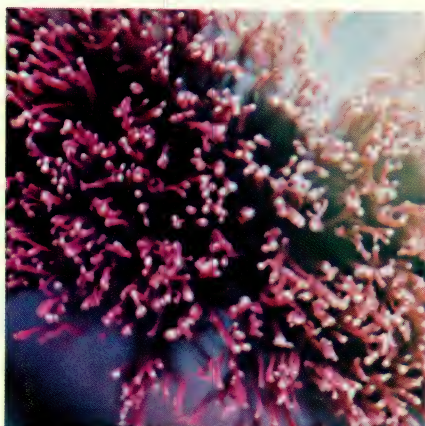
Answer Drawer, page 60



1. Rib sticker



2. One of the bunch



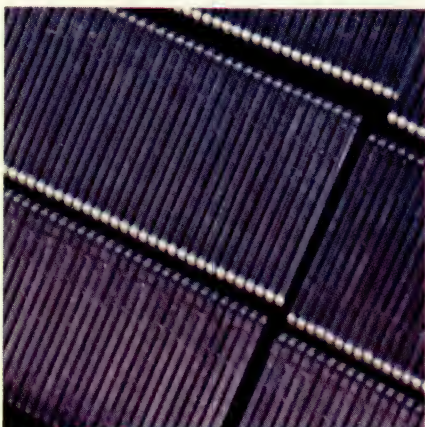
6. Witch wheels



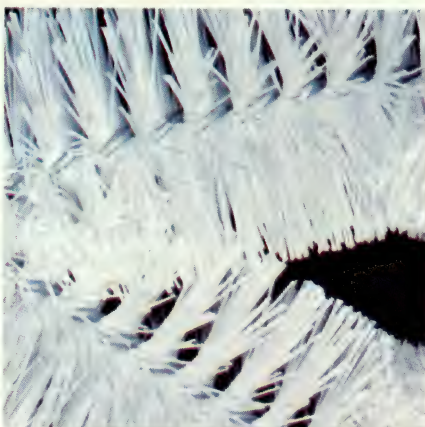
7. Bender vendor



8. Flights of fancy



12. Pressed into service



13. There's the rub



14. Gutsy



18. To the point



19. Shake, rattle and roll



20. For a tough nut



3. Bottled up inside



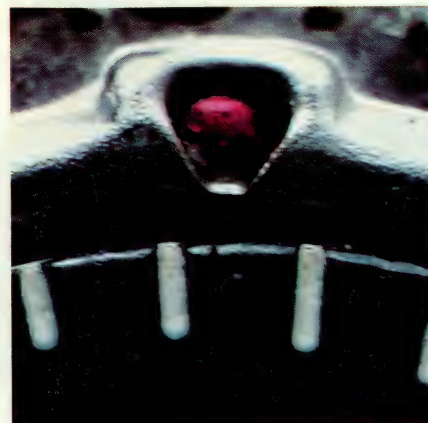
4. Good build



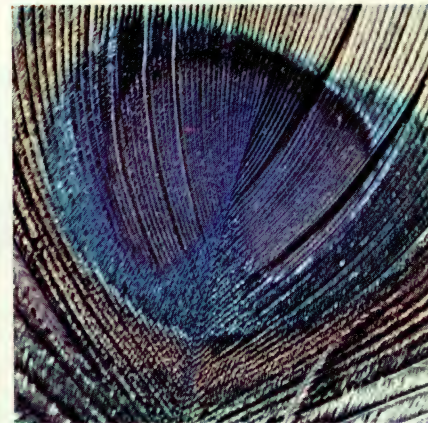
5. The real thing



9. Daily grind



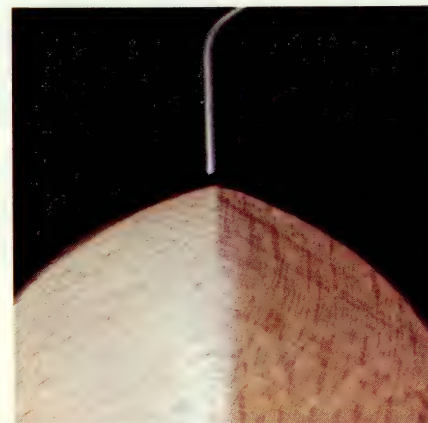
10. Tumbling act



11. The eyes have it



15. Sock it to me



16. Rack it up



17. Hot head



21. Piercing glance



22. Smokescreen



23. Gripping

The art of illusion, so crucially important in fiction and magic, occasionally surfaces in puzzles, too—particularly in the kind I find most beguiling. During the past several years, while writing books of games and puzzles and editing a monthly column on the subject, I've studied tens of thousands of problems. Most of them simply require a lot of persistence. For example, I once spent a couple of brain-battering hours laboriously figuring out what digits are represented by the letters in this substitution problem: A B C D E

x 4
E D C B A.

That, as you'll quickly see if you try it, is a crisply precise exercise, solvable by a goodly dose of logical analysis and very little else. (See Answer Drawer, page 60.) But it's not the kind of puzzle I'm talking about now.

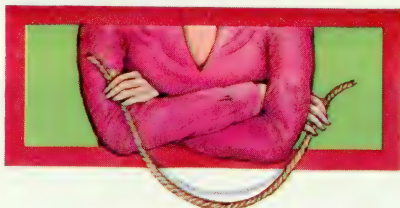
What I have in mind is the variety that slyly lures you into thinking you're being asked one thing when you're really being asked something altogether different. Here is an elementary and well-known example: **If a plane crashes directly on the boundary between Oregon and California, where are the survivors buried?** At first glance you're apt to think you're being asked a quasi-legal question: what, in such circumstances, would the authorities do? It is only later that you realize—probably with an anguished groan—that live people don't customarily get buried at all.

Or consider another example in the same genre. **What do the following words have in common: deft, first, calmness, canopy, laughing, stupid, crabcake, hijack?** Your initial impulse, no doubt, is to examine the meanings of the eight words, or their parts of speech, or some such traditional and obvious characteristic. It may take awhile, therefore, to realize that you are not being asked to look at these words *as words* at all but rather as mere sequences of letters. At that point you are ready to notice that each contains three consecutive letters of the alphabet, all lined up in a row.

FOUL PLAY

Puzzles that Aren't
What They Seem
by James F. Fixx

Fortunately, there are ways to spot this sort of puzzle. Chief among their idiosyncrasies is the fact that very early in your efforts to solve them you may well conclude that they are impossible. Either you don't seem to have enough information, or they seem self-contradictory, or it is simply apparent to any idiot that they can't be done. Period. A case in point: **Is it possible to pick up a piece of rope, one hand holding each end, and tie a knot in the rope without letting go of either end?** Isn't this patently *not* possible? Of course it is—unless topological inspiration strikes and it occurs to you to fold your arms before picking up the rope, and then simply to unfold them in order to form the knot.



A second warning that your mind is deliberately being led astray occurs when a puzzle appears to be unnaturally easy. Here is a pleasing example: **Thirteen percent of the people in a certain town have unlisted phone numbers. You select three hundred names at random from the phone book. What is the expected number of people who will**

have unlisted numbers? Before you congratulate yourself on your speed at solving such a puzzle, it's a good idea to double check in order to make sure you really know what's up. (You might, for example, begin by asking yourself whether the names of *any* people with unlisted numbers would appear in the phone book.)

A third clue to this type of puzzle pops up whenever a puzzle looks much like one you're already familiar with. In such a case, it just may be that the puzzle's inventor has been diabolical enough to try to mislead you into thinking you already know how to solve it. I'll confess I stumbled badly when I first saw this one: **The letters of the alphabet can be grouped into four distinct classes. The first thirteen letters may be used to establish the categories:**

A M
B C D E K
F G J L
H I

Where do the remaining thirteen letters belong? Scanning the letters quickly, I assumed that the categories would be based on something like the familiar fact that some letters are made up of straight lines, some of curved lines, and some of a combination of the two. But no; here were not three but four categories, and the distinction called for was clearly quite different. I spent a lot of time searching in frustrating dead ends before I saw that the four groups were letters with symmetry about their vertical axes, letters with symmetry about their horizontal axes, letters with no symmetry at all, and letters with symmetry about both their vertical and horizontal axes.

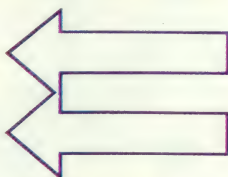
No question about it: these sleight-of-hand tricks are a maddening species of puzzle. Every time I stub my toe on one I tell myself: Never again. Perhaps I'm hoping that one day I'll become so alert and so clever at spotting them that none will ever again catch me off guard. But that hasn't happened yet. If it ever does, come to think of it, something sweet will have slipped out of my life.

And Now You're on Your Own



1. By moving only one pail, line them up so that full pails and empty ones alternate.
2. A standard chessboard is truncated by removing two corner squares diagonally opposite each other. Can thirty-one dominoes, each able to cover two adjacent squares, be used to cover all sixty-two squares of the truncated board? If so, how? If not, why not?
3. Divide a cake into eight equal pieces with only three cuts.

4. A woman goes to a hardware store to buy something for her house. She asks the clerk the price, and he replies, "The price of one is twelve cents, the price of twelve is twenty-four cents, and the price of a hundred and forty-four is thirty-six cents." What does the woman want to buy?



5. Using only two straight lines, make a third arrow identical to the two shown above.



6. The mysterious object above was discovered by archaeologists excavating the site of an ancient Roman city. Can you figure out what it was used for?
7. Using six matches of identical length, make exactly four equilateral triangles.
8. Where do you often see the fraction $\frac{24}{31}$?

Answers will appear next issue.

James F. Fixx is the author of Games for the Superintelligent, More Games for the Superintelligent, and The Complete Book of Running.

"I have my own ideas about smoking."

"I know what I like out of life. And one of the things I like is smoking. But there's no getting away from the stories I keep hearing about cigarettes and high tar.

"There's also no getting away from why I smoke. I smoke for the pleasure of it. For the taste. And for enjoying a cigarette after my long day as a teacher.

"Then at night when I work my other job—as a drummer—I enjoy lighting up between sets. It's part of the way I live.

"For me, the dilemma was how to find a cigarette that could give me taste without high tar. And that was quite a dilemma.

"Which is why I appreciate Vantage as much as I do. It's the only low-tar cigarette I've found (and I've tried several other brands)

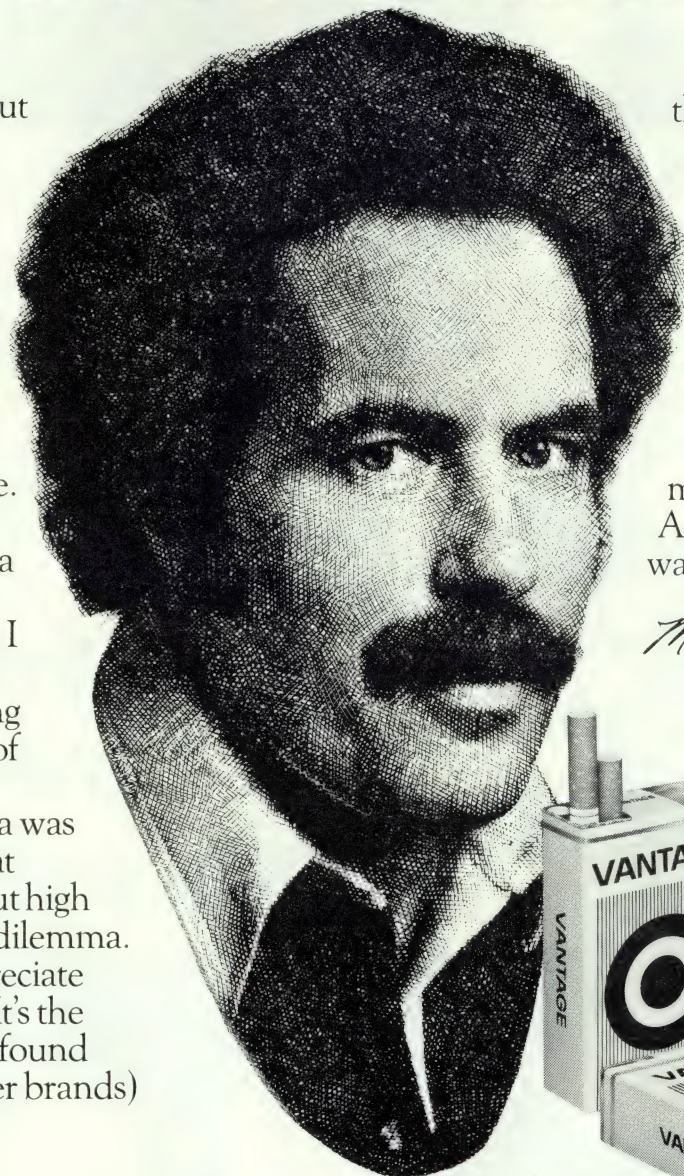
that really gives me cigarette taste and satisfaction.

"And the Vantage filter is especially neat because it's firm yet easy drawing.

"As far as Vantage goes, my mind is made up. And that's just the way I like it."

Mike Barbano

Mike Barbano
Atlanta, Georgia



Regular, Menthol,
and Vantage 100's.

Vantage. A lot of taste without a lot of tar.

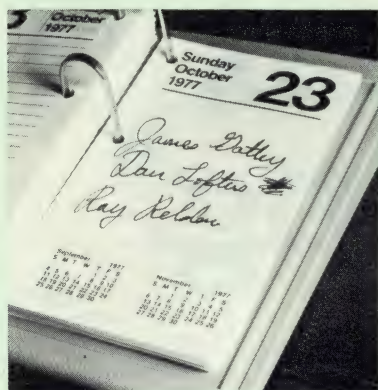
Warning: The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.

FILTER: 11 mg. "tar", 0.7 mg. nicotine,
MENTHOL: 11 mg. "tar", 0.8 mg. nicotine, av. per cigarette, FTC Report AUG. '77;
FILTER 100's: 11 mg. "tar", 0.9 mg. nicotine av. per cigarette by FTC method.



Time Out for Crime

by Walter Gibson



1. This memo was written by Titus Graff, New York gem dealer, before he left his Manhattan office for Ridgelawn, Connecticut, 60 miles away, on Saturday afternoon.

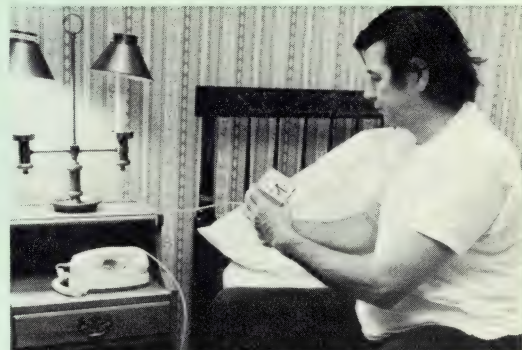


2. Graff took a cab from Ridgelawn station to his secluded lodge in the hills. By noon on Sunday the phone company received several complaints that Graff's phone was continually busy. A repairman was dispatched to the lodge and through a front window he saw Graff's body slumped on a desk, with the phone out of its cradle.

The county coroner, summoned to the scene, found that Graff had been shot in the back of the head, dying instantly, between 7 and 8 that morning. The coroner immediately sent for Inspector Orestes Mountebank.



3. Arriving on Monday morning, the Inspector was introduced to Myrtle Clay, Graff's secretary, who had come from New York with the memo book Graff had left there. She stated that Gately and Loftus both lived in Glenwood, a half-hour's drive from Ridgelawn, while Reldon was a jeweler who traveled between Boston and Chicago. All were customers of Graff's, and when contacted by Mountebank, they agreed to come to the lodge.



4. James Gately arrived at noon and stated: "... The alarm woke me at 7:30 a.m. Sunday, and the sun was just rising when I stepped outside for the newspaper. Graff had said he might call between 7:30 and 8:00, to have me come over and see some diamonds.



5. "I drank coffee and read the paper for the next half hour. When no call came from Graff, I put on my hat and coat and decided to drive to Vermont and stay overnight with my wife, who is visiting up there."



6. Dan Loftus arrived soon after and told Mountebank: "I was up early on Sunday and the day was so bright and sunny that I went out to the garden. I heard the phone ring and hurried in to answer it. It was Graff, calling at 7:30 as promised, saying there was no need to come over as he had sold the diamonds."

"Truth depends on the time at which it's told."



7. Loftus continued: "Graff said he'd tried to call Gatley with the same message, but had gotten no answer. I was on my way to play golf, and since Gatley's house is on the road to the country club, I said I'd stop by there on my way. I took my golf bag and started over there. But when I passed Gatley's, nobody was there. His car was gone from the garage."



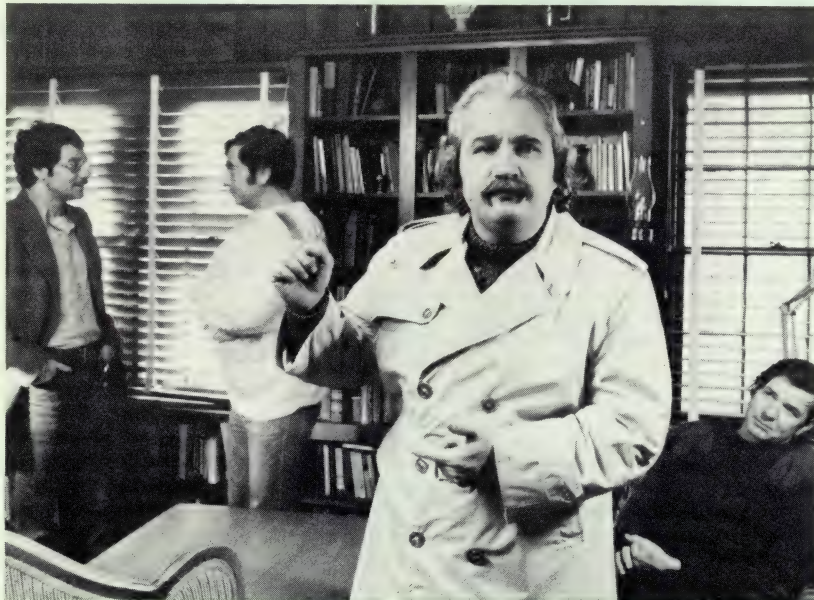
9. Ray Reldon flew in from Chicago on Tuesday and stated: "I was driving down from Boston on Saturday night and I stopped in a Connecticut motel about 75 miles from New York and 15 miles from Ridgelawn. I checked out at 10 minutes of seven on Sunday morning, setting my watch by the motel clock. I stopped for breakfast on the highway and afterward I called Graff to find out how to get to his place, but the line was continually busy."



8. Inspector Mountebank interjected a question: "What time was it when you passed Gatley's?" Loftus replied: "It must have been about 7:45, because when I got to the country club it was only 7:50 by the clock over the entrance—and it's always right!"



10. "I stopped at a couple of service stations," continued Reldon, "and tried again, with no luck, until I realized that I must have been way past the turn-off. So I continued to Kennedy Airport, returned my rental car and made another try. But I got the same busy signal. So I took the noon plane for Chicago."



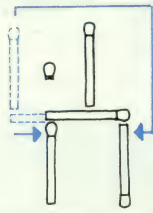
Inspector Mountebank, unable to build a hypothesis from physical evidence, analyzed the situation thus: If one of these three men—Gatley, Loftus, or Reldon—had managed to reach the lodge and had murdered Graff for the diamonds, that man alone is likely to be lying while the others are likely to be telling the truth. Hence any inexplicable conflict of testimony between two men could free the third from suspicion. And if such a discrepancy were lacking, any substantial agreement between two of the suspects might shift the burden of suspicion onto the third. Working on that basis, Mountebank picked one man for further questioning. Which man was he—and why?

Answer Drawer, page 61

Answer Drawer

My Ten Favorite Brain Teasers (Page 16 of January/February issue)

1.



2. It is only necessary to cut the three links of one piece. They can then be used to join the remaining three pieces into the circular bracelet.

3.



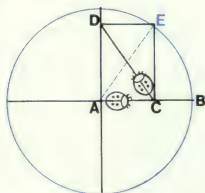
4. Sal wins again. In the first race she ran 100 yards in the time it took Saul to run 90. Therefore, in the second race, after Saul has gone 90 yards, Sal will have gone 100, so she will be alongside him. Both will have 10 more yards to go. Since Sal is the faster runner, she will finish before Saul.

5. You need only shake one coin from the box incorrectly labeled 15 cents. Suppose it is a dime. The coin still in that box cannot be a nickel, because the box would then be correctly labeled. Therefore it is a dime. The box labeled 10 cents cannot contain two nickels (or it would be labeled correctly), nor can it contain two dimes because two of the three dimes are in the box labeled 15 cents. Therefore it must contain a dime and a nickel. This leaves two nickels for the box labeled 20 cents.

But if the coin shaken from the box labeled 15 cents is a nickel, similar reasoning will identify the contents of all boxes.

6. Continue the deal by taking cards from the bottom of the packet of undealt cards, dealing first to yourself, then counter-clockwise around the table.

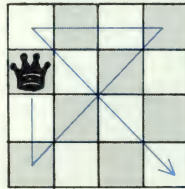
7. The dotted line (AE) in the illustration below shows the other diagonal of the rectangle. The diagonals of a rectangle are equal, therefore $CD = AE$. And since AE is a radius of the circle, CD has the length of a radius. But AB is also a radius. Consequently $AB = CD$, and the race will be a tie.



8. Miss Blue's dress cannot match her name, so it must be green or black. Since the lady in black replies to Miss Blue's remark, Miss Blue's dress cannot be black. Therefore it is green. Now consider Miss Black. Her dress cannot be black (or it would match her name),

and it cannot be green because Miss Blue is wearing green. Therefore it is blue. This leaves the black dress for Miss Green.

9. [See Laundry Basket, page 5, for a clarification of the instructions.]



10. The symbols are the numerals 1, 2, 3, 4, 5, 6, 7 shown alongside their mirror reflections. The next symbol, therefore, is the double 8, as shown at the far right, below.



Chess Pieces (Page 44)

A. White moves his queen left and forward on the white diagonal two squares, taking Black's pawn with check. Black must capture White's queen with his pawn. White moves his white-squared bishop forward and to the left three squares, giving checkmate to the Black king.

B. White moves his bishop forward and left one square, giving check with his queen. Black moves his king one square to the left. White moves his queen back one square, giving check. Black moves his king one square to the left. White moves his queen two squares to the left, giving checkmate.

C. White moves his knight to the white square two squares in front of his rook, giving check with the knight. Black moves his king to the right, either to the white square or the black one. White moves his knight to the square in front of the Black bishop, giving check with his rook. Black captures the White knight with his king. White moves the pawn that is farthest to the right forward two squares, giving checkmate with the pawn.

Backgammon (Page 46)

Diagram 2 Solutions: a) 6-5: Play MS MR. When two or more of your opponent's men are on the bar, you can be very liberal in leaving blots because your opponent must use both his dice for entering. The two builders you post on your 8-point and 7-point will be most effective in making a 5-point board, or in rehiting your opponent, or in making a prime if your attack fails. b) 5-5: J-Y TY. Did you miss seeing this move? This "15-5" play is often overlooked even by good players. Playing M-W MR2 (the number 2 denotes that two men are moved) is also good, the theory being to avoid advancing men all the way to the 1-point when builders can be brought down to aim for the 2-point. c) 4-3: J-Q. Since you are unable to post two additional builders in direct range of your 2-point, you might as well move from 9-point to 9-point.

The Hot Stove League (Page 50)

- Hank Aaron.
- Joe DiMaggio, 56, 1941.
- Willie ("Hit 'em where they ain't") Keeler, Baltimore, NL, 1898.
- Yes, the New York Yankees, 1932 (155 games).
- The Chicago Cubs won 116 games in 1906.
- The New York Giants, 26 games, 1916.
- Reggie Jackson, Yankees, 1977, 5 homers.
- Hoyt Wilhelm, 1070 games, 1952-1969.
- Mickey Owens.
- Al Gionfriddo.
- Dickie Kerr.
- Harold Henry Reese.
- Ty Cobb (.367), Rogers Hornsby (.358), Shoeless Joe Jackson (.356).
- Felipe, Matty and Jesus Alou played for the Giants on September 10, 1963.
- Frank Robinson for Cincinnati (NL) and Baltimore (AL).
- Yes, James A. (Catfish) Hunter, now with the Yankees. He pitched a perfect game for Oakland against Minnesota on May 8, 1968.
- Bob Gibson, 35 in 7 games, for the Cardinals in 1968 (vs. Detroit).
- Walter Johnson (Washington), 113 shutouts, 1907-1927.
- Johnny Podres won the game (2-0) vs. the Yankees. Sandy Amoros made the great catch. This was the Dodgers' first Series victory.
- a. Pepper Martin
b. Lou Gehrig
c. Casey Stengel
d. Willie Mays
e. Ty Cobb
f. Honus Wagner
g. Dick Stuart
h. Henry Aaron
i. Christy Mathewson
j. John Montefusco
k. Walter Johnson
l. Duke Snyder
m. Rogers Hornsby
n. Phil Rizzuto
o. Gil Hodges
p. John Montefusco
q. Paul Waner
r. Lloyd Waner
s. Enos Slaughter
t. Stan Musial
u. Ted Williams
v. Frank Baker
w. Joe DiMaggio
x. Leroy Paige
y. Carl Hubbell

Loose Change (Page 52)

The foiled victory puzzle. HEADS moves the penny from space 21 to space 43, a position which, it so happens, is illustrated in Diagram 3.

The 95-cent puzzle. HEADS has 33 cents (a quarter, a nickel, and 3 pennies) and TAILS has 62 cents (2 quarters, a dime, and 2 pennies). There are two ways (that we know of) to position the coins. HEADS has a nickel on 11, penny on 21, quarter on 22, penny on 23, and penny on 33; TAILS has a penny on 53, quarter on 61, dime on 62, quarter on 63, and penny on 71. Or HEADS has a penny on

11, penny on 21, penny on 22, quarter on 23, nickel on 33; and TAILS has a quarter on 53, quarter on 61, dime on 62, penny on 63, penny on 71.

Eyeball Benders (Pages 54, 55)

- Oatmeal box label
- Coconut
- Stacked milk crates
- Brick wall
- Roll of film
- Broom
- Camera
- Spiral staircase
- Electric shaver
- Combination lock
- Peacock feather
- Staples
- Scrub brush
- Tennis racket
- Light bulb
- Coat hanger
- Electric rollers
- Pencil shavings
- Roller coaster
- Wrench
- Headlight
- Cigarette filters
- Knife handle (with brass stud)

Foul Play (Page 56)

Answer to the Substitution Problem. The peculiar beauty of this puzzle is that it can be done in an elegantly logical way. It is worth going through step by step, as an illustration of how an apparently difficult problem yields to a certain sort of mind:

- The puzzler realizes that, since A multiplied by 4 yields only a one-digit answer, it must be either 1 or 2.
- Since $E \times 4$ must yield an even number, A must be 2.
- Since the only numbers that, when multiplied by 4, yield a figure ending with 2, are 3 and 8, E must be either 3 or 8.
- Since $A \times 4$ cannot be 13—that is, cannot be a two-digit number—it must be 8. Therefore E is 8.
- Since a 3 is carried over to D in the top line, it must also be added to D in the answer. We can see that $B \times 4$ must yield a one-digit answer. This means that B must be either 1 or 2. If it is 2, then with the 3 added to it D would be 11—which is impossible. Therefore B must be 1.
- Now consider D. The question here is simple: What number, when multiplied by 4 and enlarged by the carried 3, will yield a number ending in 1? Two numbers fill the bill: 2 and 7. Since we already know that A is 2, the missing number must be 7.
- The B in the top line must have a carried 3 added to it in order to yield 7 in the answer, so C multiplied by 4, with its carried 3, must be at least 30. The only numbers that will work, therefore, are 7, 8, or 9. Since we know that D is 7, and E is 8, 9 must be the missing number.

$$\begin{array}{r} \text{Therefore: } 2 \ 1 \ 9 \ 7 \ 8 \\ \phantom{\text{Therefore: }} \times 4 \\ \hline 8 \ 7 \ 9 \ 1 \ 2 \end{array}$$

(other answers in next issue.)

EUREKA!

EUREKA will appear from time to time in fitting recognition of those venturesome spirits who, never settling for a ready answer, have fought their way to a better, more elegant, or more complete solution than one previously given in the Answer Drawer.

★ Mappit Highway Maze (November/December, page 16). In the January/February issue of **GAMES** we reported in this column that our routing had been "bettered by 58 miles," for a new low of 637 miles. Since then ten readers have sent us even lower totals, with the best solution to date coming from Jim Sinclair of La Canada, CA. He managed to travel through all 23 counties in only 614 miles. Mr. Sinclair's routing is as follows:

From Grant in Perkins County:	
North on Hwy. 61 to jct. Hwy. 2	91 miles
East on Hwy. 2 to Dunning	89
East on Hwy. 91 to Taylor	46
South on Hwy. 183 to jct. Hwy. 70	25
West on Hwys. 70 & 92 to jct. Hwy. 97	88
South on Hwys. 97 & 70 to N. Platte	30
East on Hwy. 30 to Cozad	45
South on Hwy. 21 to jct. Hwy. 23	14
East on Hwy. 23 to Holdrege	38
West on Hwy. 6 to jct. Hwy. 61	122*
South on Hwy. 61 to Benkelman	26
Total	614 miles

*Using black mileage figures.

★ The Original "What's Wrong With This Picture?" Picture (November/December, page 41). In the previous Eureka one reader noted the existence of a 16th "absurdity" of perspective. But now, thanks to the tenacity of three other readers, we can report 26 "absurdities." Lawana Ritchie of Paso Robles, CA, Rich Olsen of Baltimore, MD, and P.G. Smith of Perth, Ontario, found the following:

17. The two main buildings in the picture tilt in opposite directions.
18. The sunlight and the shadows on the lake go in opposite directions.
19. The boards on the building in the foreground slant in different directions.
20. The tree near the buildings seems to be growing out of the bridge.
21. The artist attempts to show both ends of the church without regard for architectural perspective.
22. The wagon and horses on the bridge are not sized in proportion to their surroundings.
23. The bridge footings are not in line.
24. The right arch of the bridge has a reflection that is too short relative to the left arch.
25. The swan on the distant lake is as large as the people in the sailboat.
26. The man in the boat seems to be shooting the bridge.

★ Yard Sale (November/December, page 50). In January/February **GAMES** we acknowledged an improvement of \$105 over our stated claim that \$1,675 was the highest profit possible. We went on to say that a check of our figures produced an error which raised our profit to \$2,175. Well, David Bennett of Fredericton, N.B., Canada noticed our mistake and then proceeded to beat us anyway. He bought items, 2, 5, 7, 11, 13, 14, 16, 19, 20, and 23 for \$500, which at fair market value produced a profit of \$2,275 or \$100 more than our "corrected" solution.

★ Bookshelf (September/October, page 46). In the answer to the second backgammon problem, we said parenthetically that rolls of (4,1), (2,1), and (1,1) should be executed in the same manner as (3,1)—which was the original question. After playing W1-W8 and W6-W5, a roll of (6,6) or (5,5) would allow White to win the game (assuming of course that Black does not roll doubles). But Timothy Riordan of Peabody, MA notes that a roll of (1,1) should be played W2-OFF and W6-W4. This would allow not only (6,6) and (5,5) to win the game for White, but also (4,4).

State of Confusion (Page 47): Hint

In the finished puzzle, the road signs are arranged in alphabetical order (K through T), reading from left to right and top to bottom, with K somewhere in the top row and T somewhere in the second from bottom row. (Complete solution on page 62.)

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Time Out for Crime (Pages 58, 59)

Inspector Mountebank chose Ray Reldon as the culprit, despite the sharp variance in statements made by James Gatley and Dan Loftus. Presumably, if Gatley had actually been at home from 7:30 to 8:00, Loftus would have seen his car there when he drove by at 7:45, so Loftus might be lying and could have been driving over to the lodge during that half hour, intending to rob Titus Graff. Conversely, if Gatley had been gone by 7:45, as Loftus stated, Gatley might be lying and could have been on his way to Graff's.

Mountebank brilliantly accepted both statements as true, since their apparent discrepancy was due only to the fact that Sunday, October 23, 1977, was the day when clocks were turned back from Daylight Savings Time to Standard Time (clue, photograph 9). So when Gatley said his alarm woke him on Sunday morning at 7:30, the time was actually 6:30. That means that Gatley was off on his long drive to Vermont before Graff tried to phone him and Loftus stopped by. The clock that Loftus saw over the clubhouse entrance had presumably been set back, so his statement regarding the time was also truthful. Also note that Gatley said the sun was just rising, while Loftus said the day was already bright and sunny, indicating the difference of an hour.

Everything else confirmed the statements made by Gatley and Loftus, which put the burden fully on Reldon. When he checked out of the motel at 6:50 Standard Time, he had plenty of time to cover the 15 miles to Graff's lodge to keep what Mountebank presumed was a firm appointment. Probably he already knew the way, but even if he did stop to phone Graff, he would have gotten him, for Graff's line wasn't busy until after 7:30.

As Mountebank pictured it, Reldon must have bought the diamonds on sight, paying Graff a sum he couldn't refuse. That was why Graff phoned Loftus and told him not to come, saying he had sold the diamonds. He had been keeping Gatley and Loftus in reserve, just in case he couldn't make a big sale to Reldon. When Graff reached for the telephone, probably to try Gatley's number again, Reldon had his chance to pull a gun, shoot him in the back, and retrieve the money he had paid, along with the diamonds. That had been his plan from the start.

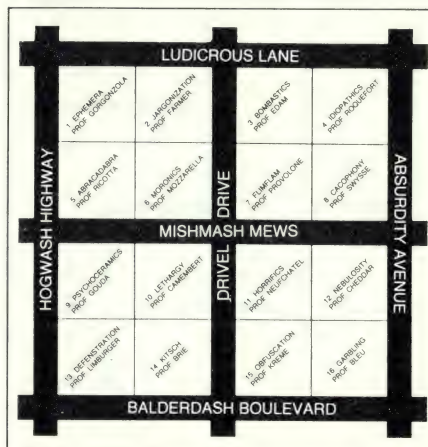
Leaving the phone off the hook was Reldon's final touch, as anyone trying to reach Graff would think he was still alive and busy, and therefore wouldn't wonder why Graff didn't answer. It would also corroborate Reldon's story of being unable to reach Graff for instructions on how to get to the lodge, provided investigators learned he was expected there, which they did. On the way to the airport, Reldon made the anonymous calls, reporting Graff's phone out of order. All of this came out when Inspector Mountebank quizzed Reldon so masterfully that he finally broke down and confessed.

Book Shelf (Page 53)

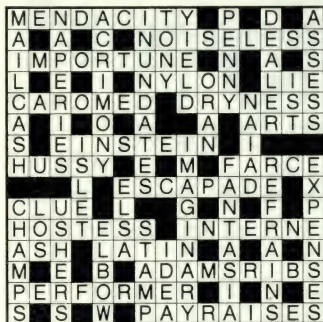
You need the missing vowels, because with them you will have the titles of six of the Marx brothers' films: *Animal Crackers*, *Monkey Business*, *Horse Feathers*, *Duck Soup*, *A Night at the Opera*, *A Day at the Races*.

Evil Cerebral (Page 48)

For a copy of a detailed solution to Fromage Academy, please mail a stamped, self-addressed, business size envelope to: Evil Cerebral, **GAMES** Magazine, 515 Madison Avenue, New York, NY 10022.



Crossword à l'Anglaise (Page 25)



ACROSS

- 1 Mendacity (mend a city)
- 10 Noiseless (oils + sense)
- 11 Importune (not + impure)
- 12 Nylon (any long)
- 14 Lie
- 16 Caromed (cad + rome)
- 17 Dryness (dry Ness)
- 19 Arts (star)
- 20 Einstein (ein [one] + stein)
- 23 Hussy (shy + us)
- 24 Farce (r + face)
- 27 Escapade (sad + peace)
- 28 Clue (Hercule minus her)
- 31 Hostess (she + toss)
- 34 Interne (enter + in)
- 35 Ash
- 36 Latin (La-tin)
- 38 Adam's ribs
- 39 Performer (supper for mere)
- 40 Pay raises (say + praise)

- 13 Oran (Nora)
- 15 Ist (sit)
- 18 Naiad (Diana)
- 21 Islet (is let)
- 22 Imaginary (I + gain + Mary)
- 24 Fantasia (if + a + Santa)
- 25 Refrains
- 26 Expenses (sexes + pen)
- 27 Elsa (sale)
- 28 Champs (chaps + M [1,000])
- 29 Los (sol)
- 30 Ushers (rushes)
- 32 Elbow
- 33 Stamp
- 37 Idea (aide)

DOWN

- 1 Mail cash (has + claim)
- 2 Naperies (naps + Erie)
- 3 Acrimony (any + rim + co)
- 4 Inundates (dunes + ain't)
- 5 Tony (Y + not)
- 6 Yield
- 7 Penny (N.Y. + pen)
- 8 Dealer
- 9 Assess (Has session)

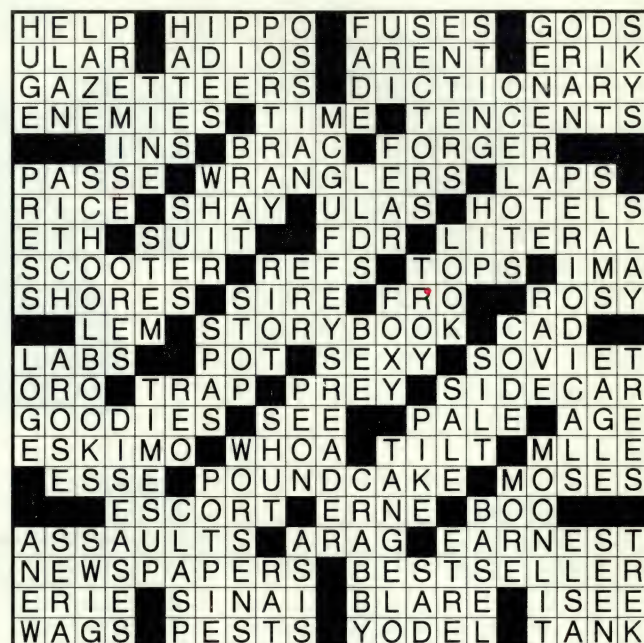
Similarities (Page 29)



Right Angles #1 (Page 28)



Roll the Presses (Page 27)



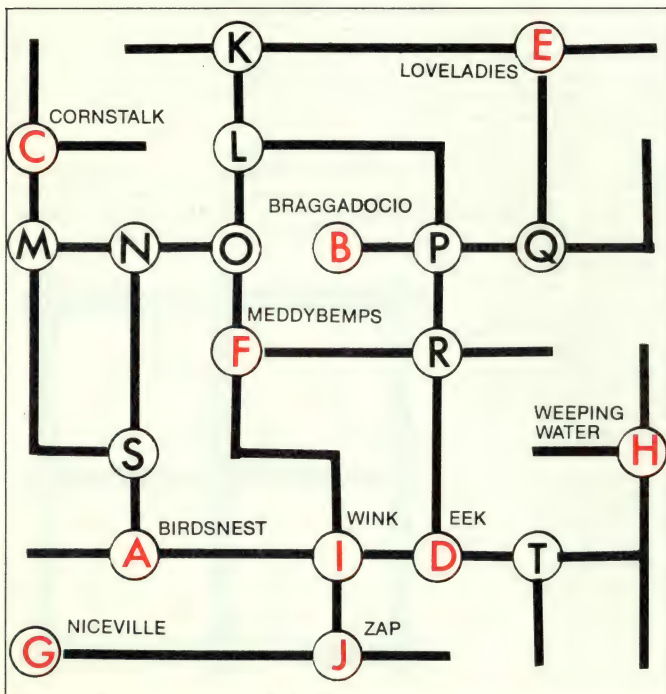
Good News (Page 29)



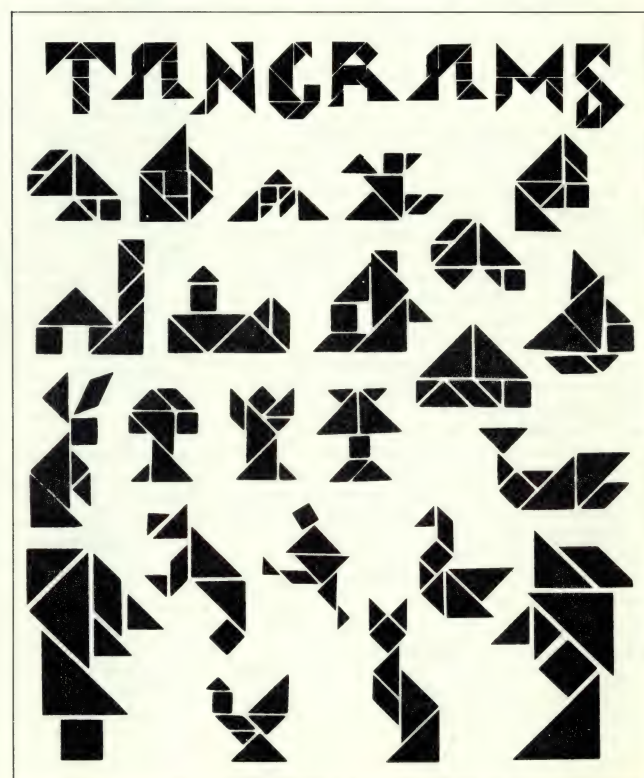
Right Angles #2 (Page 28)

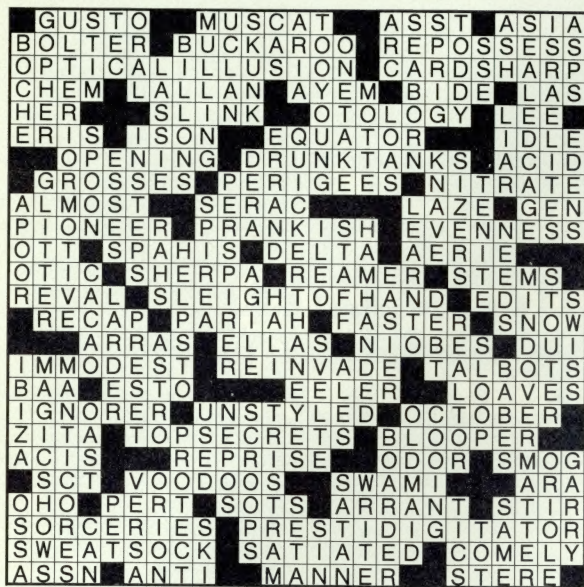


State of Confusion (Page 47)



A Tangram Teaser (Pages 14, 15)





Incredible Rebus (Page 32)

A 5 ft. 9 in. woman from Denton, Montana, has a twin brother in Chicago who ... STANDS EIGHT FEET TWO INCHES TALL!

(His name is Don Koehler and he lives in Chicago. He is the tallest living human being.)

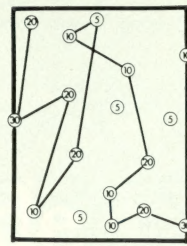
The solutions to the individual rebuses are provided at right.

N.Y. + Rooster — Rooney + W + Hoe — Horse + O = TWO
 Sinatra — Star — A + Charles + T — Art — L = INCHES
 Fields — Sid + B + Seal — Balls + T = FEET
 Stan + Godfrey — Y — Frog — E + B.S. — B = STANDS
 One + Taylor — Lorne + R — Roy + Kelly — Key = TALL
 Elvis — LV + Gun + Hat — Sun — A = EIGHT

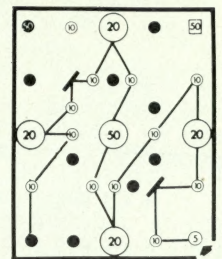
Pinball Mazes (Pages 30, 31)

Best Scores
 Hi-Roller: 240
 Atom Smasher: 215
 Bijou: 295
 Ricochet: 175
 Simple Simon: 155

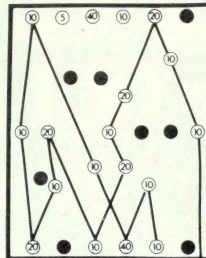
Atom Smasher



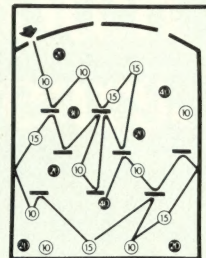
Bijou



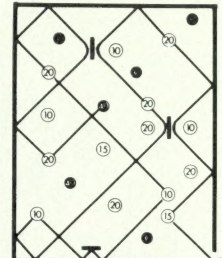
Hi-Roller



Ricochet



Simple Simon



State of the Union (Page 26): Hint (see page 64 for complete solution.)

States in the puzzle:

Alabama
 Arkansas
 California
 Hawaii
 Idaho
 Indiana
 Iowa
 Kansas
 Maine
 New Hampshire
 New Jersey
 New Mexico
 New York

North Carolina
 North Dakota
 Ohio
 Oklahoma
 Oregon
 South Carolina
 South Dakota
 Texas
 Utah
 Virginia
 Washington
 West Virginia

Capitals in the puzzle:

Annapolis
 Atlanta
 Baton Rouge
 Boston
 Carson City
 Cheyenne
 Denver
 Dover
 Frankfort
 Harrisburg
 Hartford
 Helena
 Jackson
 Jefferson City
 Juneau
 Lansing
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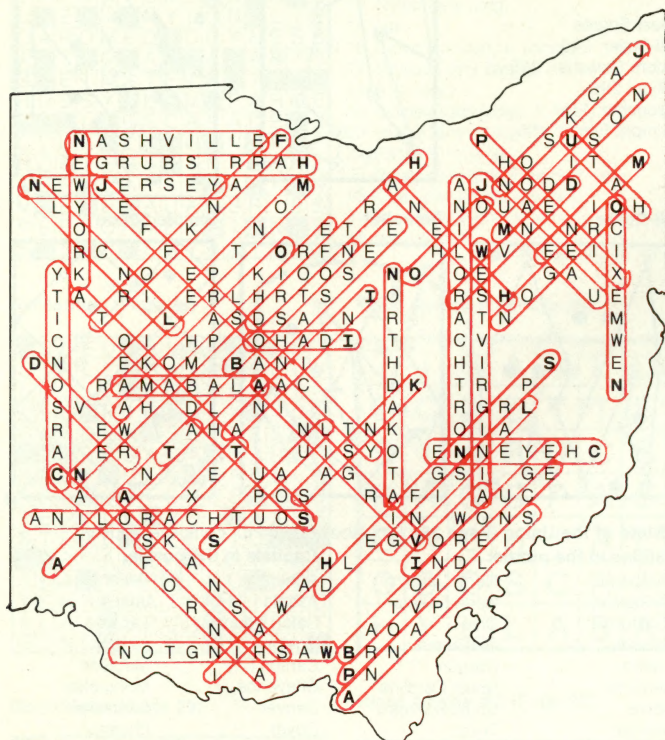
Please send me _____ shirt(s) at \$4.95 each. I enclose a check or money order for \$_____. New York residents add sales tax.

Quantity: Small _____ Medium _____ Large _____

Name _____
 Address _____
 City _____
 State _____ Zip _____

Please allow 4-6 weeks for delivery.

Note in the answer grid that the correct solution has Kansas and Arkansas in two separate places, not overlapping; likewise Virginia and West Virginia.



Only one upset



1. (b) Q
The letters in this sequence all contain curves.
2. (a) 14
Each number when spelled out is longer than the preceding number by one letter.
3. (a) X
Every letter begins with the short "e" sound.
4. (b) R
When pronounced, the letters are also common words. (Cue, Pea, Sea, Tea, You, Are)
5. (c) G
Letters are non-symmetrical (vertically).
6. (b) O
Each group of two letters forms a recognizable word.
7. (a) Z
Every letter ends in the long "e" sound.
8. (c) 8
Every other number, when pronounced, is a word. (Won, Fore, Too, Ate)

Early in her career, Shirley MacLaine worked on Broadway as both understudy and standby. Explaining the difference, Miss MacLaine said: "A standby hopes the star will get sick. An understudy hopes she'll never recover." —L. LYONS: "Fine Distinctions"

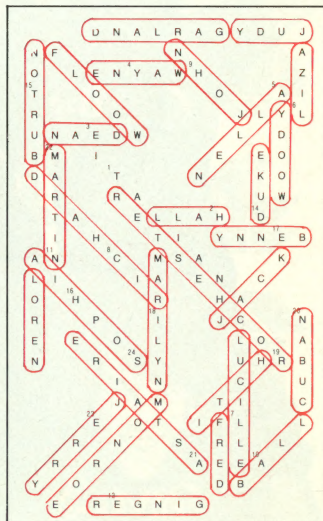
1. Madagascar, Radium, Montreal, Lansing, Greece
2. Philippines, Silver, Rotterdam, Montpelier, Rumania
3. Taiwan, Nickel, LeMans, St. Paul, Luxembourg
4. Samoa, Arsenic, Casablanca, Annapolis, Scotland
5. Azores, Silicon, Naples, Salt Lake City, Yugoslavia
6. Guam, Mercury, Yokohama, Atlanta, Afghanistan
7. Hong Kong, Gold, Dublin, Nashville, Egypt
8. Borneo, Oxygen, Nantes, Salem, Mongolia
9. Cuba, Aluminum, Munich, Harrisburg, Germany
10. Fiji, Iodine, Edinburgh, Hartford, Denmark

1. **HAM ACTORS** Shakespeare said that all the world is a stage and we are all players. Unfortunately most of us need more rehearsals.
2. **INEFFICIENT GROUP** A committee consists of several people who cannot do a job in several hours as efficiently as one person could do in one hour.
3. **GROUND'S FOR COMPLAINT** There are no unmixed blessings. Example: When a company puts in a four-day week, the employees lose two coffee breaks.
4. **MONEYTARY DILEMMA** Every taxpayer is anxious to know where his tax money is going to and even more anxious to know where it is coming from.
5. **LAW AND DISORDER** In Beirut, should the police notice your car parked illegally, they simply let the air out of one of the tires.
6. **CLIFF HANGER** Mountain climbers always rope themselves together, probably to prevent the sensible ones from going home.
7. **NOT EXACTLY RIGHT** Our wise old ancestors knew we would always be making mistakes, so they put the letter x in the alphabet for xxxxxx out.
8. **KIBITZER NEEDED** Kriegspiel is a form of chess in which each player sees only his own pieces, his opponent's moves being told to him by the referee.
9. **CAROUSEL** (Diagram is 6 down, 4 across.) Love makes the world go round.
10. **LOAFING LIFE AWAY** (Diagram is 10 down, 7 across.) It is said nothing is impossible, yet there are lots of people doing nothing every day.

S-O-C-K-S. Yes, in Spanish QUE is pronounced about half way between KEH and KAY.

THEY ALL CHANGED THEIR NAMES

Lucille Ball (Dianne Belmont)
Jack Benny (Benny Kubelsky)
Woody Allen (Allen Stewart Konigsberg)
Marilyn Monroe (Norma Jean Baker)
Sophia Loren (Sofia Scicolone)
Fred Astaire (Frederick Austerlitz)
Judy Garland (Frances Gumm)
Dean Martin (Dino Crocetti)
Richard Burton (Richard Jenkins)
John Wayne (Marion Morrison)



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*Formaldehyde, Crotonaldehyde, Acrolein



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